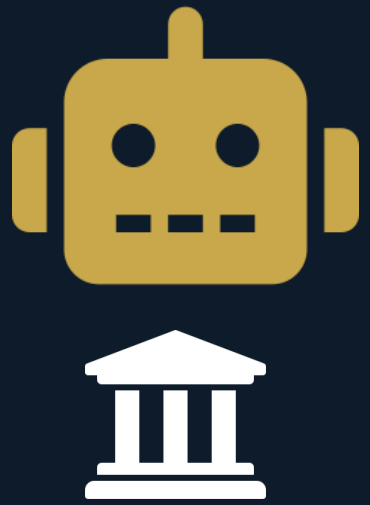
2026

Artificial Intelligence

in Bank Branch Audit



Practical Tools, Real Automation, Zero Technical Background Required

CA Vivek Agarwal – FCA |FCS | EPBA (IIMC)

AI In bank branch Audit

Working 10X Faster

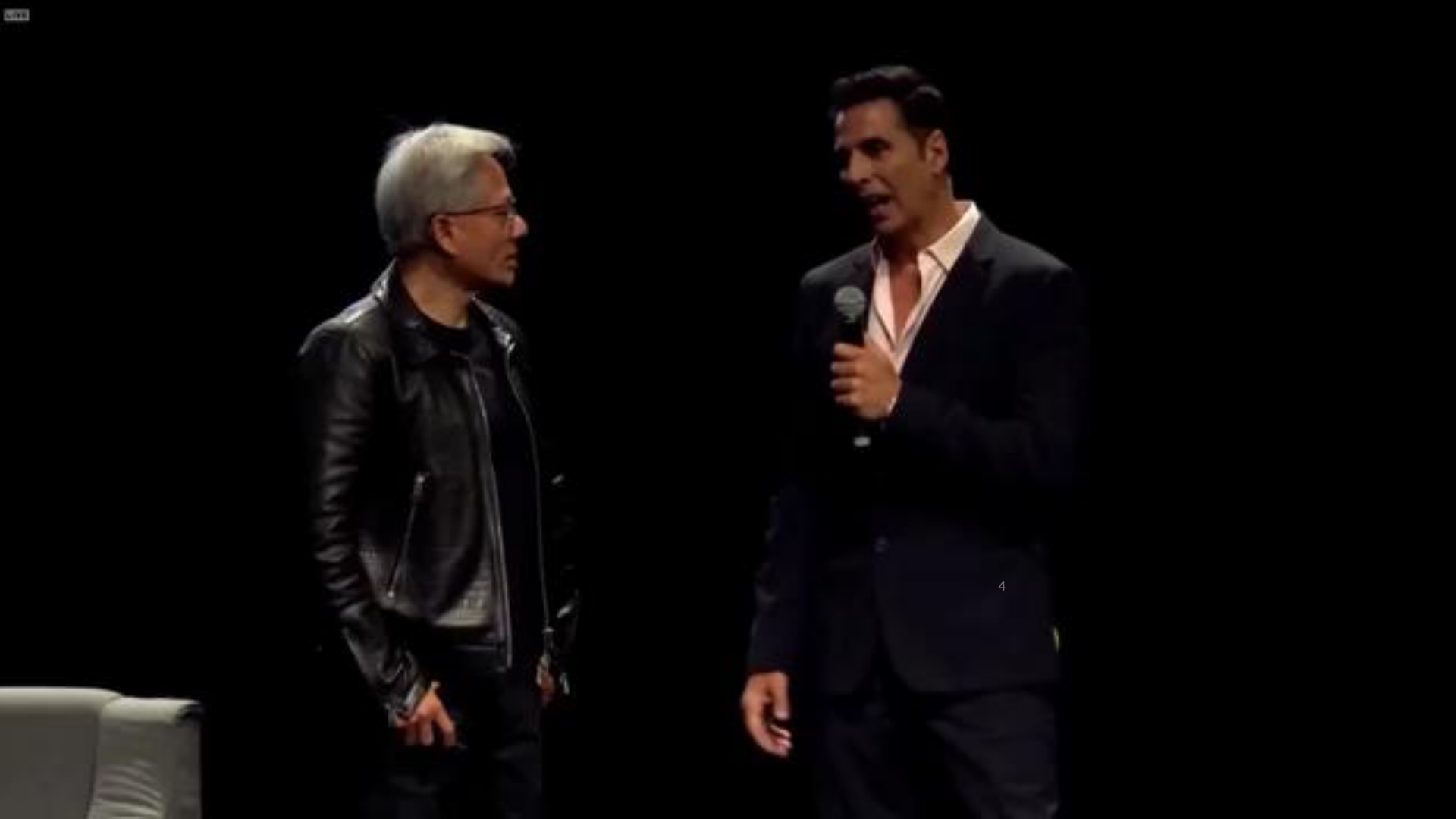
EIRC - ICAI

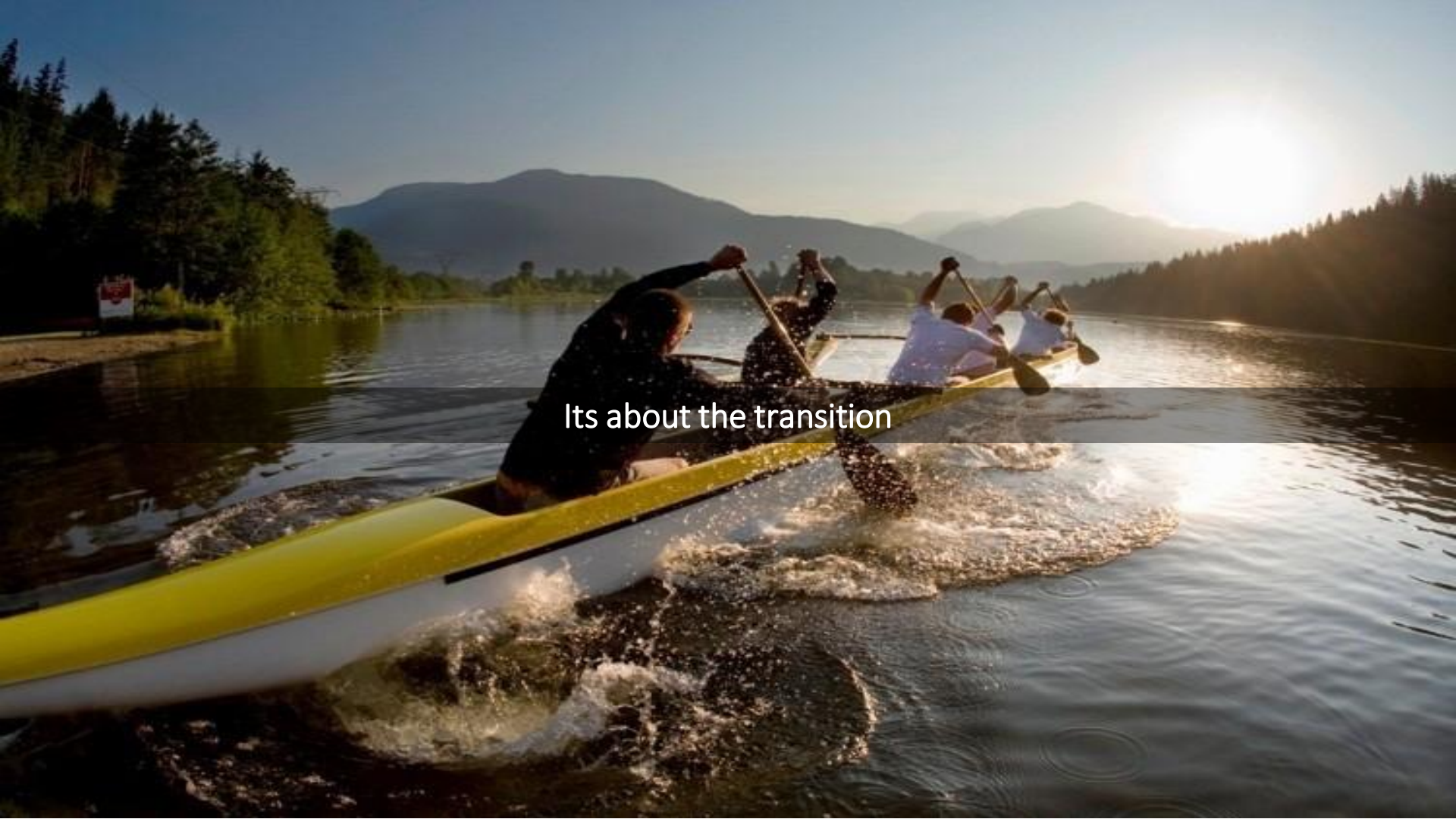
Vivek Agarwal

FCA | FCS | EPBA (IIMC)

If data is the new oil,
then code is the new currency.
Together they form the new economy.

CA Vivek Agarwal




Its about the transition

What We Cover Today

7 modules • Real bank audit use cases • No coding background needed

01 **The AI Revolution**
Why AI matters for bank auditors right now

02 **Top 5 AI Tools**
Claude, ChatGPT, NotebookLM, Gemini, Perplexity

03 **Vibe Coding**
Building tools without knowing a single line of code

04 **Python Automation**
10 real use cases from bank audit practice

05 **AI in Bank Audit**
LFAR, NPA, Advances, Deposits, Fraud Risk

06 **Claude in Office**
Excel and PowerPoint integration for bank auditors

07 **Action Plan**
Your 30-day roadmap to start today

Why AI? Why Now? Why Bank Audit?

The profession has changed more in 3 years than in the previous 30

72 hrs

Typical bank branch audit window — shrinking every year

10,000+

Average loan accounts in a medium branch

3 mins

AI reads an entire LFAR in 3 minutes

80%

Audit time spent on mechanical tasks — AI can do most of this

The Bank Auditor's Dilemma — More Data, Same Time

Every year, branch audits get harder. More accounts, more circulars, more compliance requirements — and the same 72-hour window. The CA who brings AI into the audit room is not working harder. They are working smarter. AI reads the LFAR template and drafts it. AI scans 5,000 loan accounts for IRAC flags. AI compares interest income with the expected calculation. While your competition is still manually scrolling through Excel, you have already moved to the findings.

The Bank Audit Challenge

What makes bank audit uniquely suited for AI assistance

Traditional Pain Points

- LFAR: 50+ questions, repetitive drafting every year
- NPA verification: Manually checking overdue days across hundreds of accounts
- Interest income: Re-computing expected interest for large loan portfolios
- Stock statements: Analysing DP calculations for multiple borrowers
- IRAC: Cross-checking classification across products — CC, OD, TL, KCC
- RBI circulars: Tracking 200+ circulars relevant to audit observations
- Bank reconciliation: Large volumes with manual matching
- Revenue leakage: Processing charges, penalties not levied — hard to spot

What AI Changes

- LFAR: AI drafts first version from your notes in 10 minutes
- NPA: Python flags all overdue accounts with precise day-count
- Interest: Python re-computes interest for entire portfolio overnight
- Stock: Python extracts DP from multiple PDFs and flags deviations
- IRAC: Python checks classification rules across all account types
- RBI: Perplexity finds the latest circular with citation in 30 seconds
- BRS: Python auto-matches and flags unreconciled items only
- Revenue leakage: Python systematically scans every account for missed charges

Think of AI as Your Smartest Junior

It never sleeps, never forgets, and always gives you a first draft

The Researcher

Finds the latest RBI circular, SEBI notification, or Supreme Court judgment in 30 seconds with full citations. Ask it about NPA provisioning norms or IRAC guidelines — it answers with references.

The Drafter

Takes your rough audit notes and turns them into polished LFAR paragraphs, management letter points, audit observations, and board presentations. You review. AI types.

The Analyst

Reads your Excel data — loan accounts, stock statements, interest schedules — and immediately identifies anomalies, patterns, and areas needing deeper scrutiny.

MODULE 02

The 5 AI Tools Every CA Must Know

From general-purpose assistants to specialised research engines — and which one to use when you're sitting in a bank branch at 11 PM.

Tool 1: Claude — Your Deep-Thinking Partner

Best for: Long documents, complex drafting, reasoning through audit issues

What Makes Claude Different

- ✓ Reads extremely long documents — an entire audit file, 200-page annual report, or full LFAR
- ✓ Follows complex instructions precisely — understands Ind AS, SA standards, IRAC norms without explanation
- ✓ Reasons step by step — doesn't just answer; it explains its thinking like a senior CA would
- ✓ Drafts professional text — from management letters to board presentations, in the exact style you want
- ✓ Available inside Excel and PowerPoint (covered in Module 6)

Bank Audit Use Cases for Claude

- ✓ Paste the LFAR question — Claude drafts the answer from your notes
- ✓ Share 10 pages of loan documentation — Claude flags all missing conditions precedent
- ✓ Describe an NPA account — Claude suggests the appropriate IRAC classification with reasoning
- ✓ Upload the RBI Master Circular — Claude answers specific questions with paragraph references
- ✓ Brief Claude on your findings — it drafts the complete management representation letter

Tool 2: ChatGPT — The All-Rounder

Best for: Drafting, Excel formulas, general research, quick explanations

What ChatGPT Does Well for Bank Auditors	Practical Bank Audit Prompts to Try Today
Drafts emails, reports, and memos — paste rough notes, get polished text	"Draft a qualified LFAR observation on inadequate stock insurance coverage. Tone: formal. Audience: Bank management."
Explains complex RBI guidelines in plain English — great for team training	"Explain IRAC norms for classification of CC account as NPA in simple language with examples."
Writes Excel formulas on demand — no formula knowledge needed	"Write an Excel formula that flags accounts where days past due exceeds 90 in Column C and balance is above ₹5 lakhs in Column D."
Creates training content — slides, notes, handouts for your audit team	"Create a 10-point checklist for verifying KYC compliance during bank branch audit."
Voice mode — dictate findings while reviewing documents at the branch	"[Voice] The KCC account of ABC Farmer shows overdue since April 2024, what IRAC classification applies?"

Tool 3: NotebookLM — Your Private Audit Research Assistant

Best for: Analysing YOUR files — circulars, audit manuals, client documents

🔑 **Key Differentiator: NotebookLM reads ONLY your uploaded documents — not the internet. Your audit data stays private.**

How It Works

- Upload your documents: RBI circulars, audit manual, LFAR template, client financials
- Ask questions in plain English — it answers only from your uploaded files
- Creates summaries, FAQs, and study guides from your material
- Generates audio podcasts — listen to your audit files while commuting
- Multiple notebooks — one per engagement, one for RBI circulars, one for training

Bank Audit Specific Uses

- Upload all RBI Master Circulars — ask specific questions with references
- Upload previous year LFAR — ask: 'What observations were made on NPA provisioning?'
- Upload audit manual — quickly verify which procedure applies to which account type
- Upload borrower loan file PDFs — ask: 'Is the stock insurance clause satisfied?'
- Upload bank's internal inspection report — identify areas needing audit focus

Tool 4: Gemini — Inside Your Google Workspace

Best for: Google Docs/Sheets users, real-time searches, Gmail summaries

In Google Sheets

Ask Gemini to write complex formulas, explain data, create pivot summaries, and flag anomalies — directly inside your spreadsheet. No need to copy-paste into a chat window.

In Gmail

Gemini reads your bank audit correspondence and summarises long email threads. Draft responses in one click. Never miss a deadline in your inbox again.

In Google Docs

Write your LFAR draft, audit report, or management letter with Gemini suggesting improvements in real time — like having a senior CA review every paragraph as you type.

Bank Audit Use with Gemini Search	What It Finds
Search: 'RBI circular NPA classification 2024'	Latest circular with summary, date, and key provisions
Search: 'IRAC norms KCC accounts 2025'	Updated guidelines with references to specific circulars

Tool 5: Perplexity — The Research Engine with Citations

Best for: Latest RBI circulars, case laws, regulatory updates — with sources

Unlike other AI tools, Perplexity searches the live internet and shows you exactly WHERE each answer came from — essential for regulatory research.

What a Bank Auditor Asks Perplexity	What Perplexity Returns
What is the current RBI provisioning norm for doubtful assets?	Answer with specific circular reference, date, and percentage — with clickable source link
Has RBI revised IRAC norms for agriculture loans in 2024-25?	Latest update with exact circular number, effective date, and key changes highlighted
What are the penalties for KYC non-compliance under PMLA 2024?	Current penalty structure with citation to PMLA amendment and RBI/FIU notification
What is the income recognition norm for restructured accounts?	Precise answer from RBI Master Circular with verbatim provision reference
Latest Supreme Court judgment on SARFAESI and NPA recovery	Recent judgment summary with case citation and key ruling

Which Tool — When? Quick Reference for Bank Auditors

You don't need all five every day. Use this as your reference card.

Task	Best Tool	Why
Draft LFAR answer from your notes	Claude	Understands long-form, formal writing; follows audit language precisely
Find latest RBI circular on NPA provisioning	Perplexity	Live search with citations — you can verify the source instantly
Analyse 500 loan accounts for IRAC flags	Python + ChatGPT	ChatGPT writes the Python script; Python processes all 500 accounts
Ask questions about uploaded audit manual	NotebookLM	Works only on your uploaded files — private and precise
Write Excel formula for interest calculation	ChatGPT / Gemini	Both are excellent at Excel formulas in natural language
Draft audit committee presentation	Claude in PowerPoint	Claude in PPT drafts complete slides from your findings
Summarise 20 emails from bank management	Gemini in Gmail	Gemini is embedded in Gmail — one-click summary
Research bank fraud case laws for LFAR	Perplexity	Gets you judgments with citations — not just generic answers

Getting Started Free — No Payment Required

All five tools have generous free tiers. Start today, not tomorrow.

Claude

claude.ai free plan

50+ messages/day, full reasoning

claude.ai

ChatGPT

GPT-4o free plan

Unlimited GPT-3.5, GPT-4o with limits

chat.openai.com

NotebookLM

Fully free

50 sources per notebook, unlimited queries

notebooklm.google.com

Gemini

Gemini 2.0 Flash free

Works inside Google Workspace free

gemini.google.com

Perplexity

Free plan generous

Unlimited searches with citations

perplexity.ai

MODULE 03

Vibe Coding: Building Tools Without Knowing Code

You know what you need. AI figures out how to build it. A CA as the director, AI as the developer.

Vibe Coding — The CA's New Superpower

Describe what you want in plain English. AI writes the code. You run it.

The Simple Definition

Vibe Coding = Telling an AI what tool you need, in plain language, and letting it write the technical code for you. You do not touch the code. You describe the output — and AI delivers it.

1 You Describe

'I need a tool that calculates NPA days for accounts and flags those above 90 days in red'

2 AI Builds

Claude or ChatGPT writes the complete Python script or HTML tool in 30-60 seconds

3 You Run It

You click 'run' — no coding needed. The tool processes all your data automatically

4 You Refine

'Also show me the account manager name from Column F' — AI updates the tool instantly

HTML Tools You Can Create with Vibe Coding

A browser-based tool that opens in Chrome — no installation, no IT department

Tell Claude / ChatGPT This...	...You Get This Browser Tool
"Create an HTML NPA calculator. I enter account number, sanction date, last payment date — it calculates overdue days and shows IRAC classification."	Ready-to-use NPA classifier that works offline in any browser
"Build an HTML LFAR checklist with all 50+ standard questions. I can tick off completed ones and add notes for each section."	Interactive LFAR completion tracker you can use and print
"Make an HTML interest calculation tool for term loans. Input: principal, rate, disbursement date, repayment schedule — output: expected vs booked interest."	Interest variance tool to spot revenue leakage instantly
"Create an HTML bank branch audit dashboard showing: NPA count, overdue accounts, unreconciled entries, pending verifications — I will fill the numbers manually."	Visual audit dashboard for quick status tracking at the branch
"Build an HTML DP calculation tool for stock-based CC accounts with drawing power formula, margin percentage input, and stock statement date validation."	Drawing power verifier — run on every CC account at the branch

Python — Excel on Steroids for Bank Auditors

Same familiar Excel outputs — but automated, bulk-processed, and error-free

What Python Is

Python is a programming language. But here's the secret: **you don't write it.**

You describe what you need to Claude or ChatGPT.
They write the Python script.
You click 'Run'.

Python output always comes to you in Excel.
The processing happens invisibly.
The result? Hours of work in minutes.

Where Excel Falls Short

- Struggles with 50,000+ rows — crashes or slows down dramatically
- Cannot read PDFs, connect to Tally, or download files automatically
- Each month you redo the same manual steps — no memory of last month

What Python Adds

- Processes 1,00,000 rows in under 60 seconds — no crashing
- Reads PDFs, connects to Tally via ODBC, downloads files from URLs
- Write once, run every month — automation that remembers
- Output always lands in a clean, formatted Excel file

Your First Vibe Coding Session — Step by Step

From zero to a working bank audit tool in under 15 minutes

Step 1	Open claude.ai or chat.openai.com in your browser (free account)	1 min
Step 2	Type: "Write a Python script that reads an Excel file with columns: Account No, Disbursement Date, Last Repayment Date. Calculate overdue days as of today. Flag accounts with overdue > 90 days as NPA Sub-standard. Output to a new Excel file with colour coding."	2 min
Step 3	AI returns the complete Python script. Copy it.	0.5 min
Step 4	Search Google for "Python IDLE download" — install Python. Open IDLE. Paste the script. Press F5 to run.	5 min
Step 5	Point the script to your actual Excel file. It processes all accounts and creates a colour-coded output.	2 min
Step 6	If anything is wrong, copy the error message and paste it back to Claude: "I got this error — please fix the script." AI fixes it instantly.	2 min

MODULE 04

10 Python Automation Use Cases for Bank Audit

From PDF downloading to NPA detection — real tasks from real branch audits, now done in minutes instead of days.

Use Case 1: Bulk PDF Downloader

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: During bank audit you need hundreds of documents — inspection reports, loan sanction letters, stock statements, property valuations, CIBIL reports. Someone downloads each one manually.

✅ SOLUTION: Maintain an Excel sheet with document names and download links. Python reads the Excel, downloads every PDF, and saves them in organised folders — one folder per borrower, named by document type.

How to Do This (Vibe Coding Steps)

1. List all required documents in Excel with URL column
2. Tell Claude: 'Write Python to download all URLs in Column B and save to folders named by Column A'
3. Run the script — 200 documents download automatically
4. Total time: 3 minutes instead of 3 hours

IMPACT

3 hours → 3 minutes
Error-free
Organised folders
Rerun anytime

Use Case 2: Form 26AS Extraction & TDS Reconciliation

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: 26AS from the Income Tax portal comes as a PDF. You need to reconcile TDS deducted at the branch level against bank's books — but PDF data cannot be sorted or filtered.

✅ SOLUTION: Python reads the 26AS PDF and converts every TDS entry into a structured Excel with columns: Deductor, TAN, Amount Deducted, Amount Deposited, Date. Then matches against the bank's TDS register.

How to Do This (Vibe Coding Steps)

1. Download 26AS PDF from IT portal as usual
2. Tell Claude: 'Write Python to extract all TDS entries from this PDF into Excel'
3. Python creates structured Excel in under 60 seconds
4. VLOOKUP or Python reconciles against the bank's TDS register

IMPACT

Manual data entry eliminated
Mismatches flagged automatically
Works for all entities

Use Case 3: Bank Reconciliation Automation

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: Bank reconciliation statement preparation — matching thousands of entries between bank's books and RBI/CBS data — is the most time-consuming clerical task in branch audit.

✅ SOLUTION: Python reads both datasets (bank books export and CBS data), matches entries by amount and date, and creates three lists: Matched, Unmatched in Books, Unmatched in CBS. You only look at the unmatched ones.

How to Do This (Vibe Coding Steps)

1. Export both datasets to Excel from the bank's system
2. Tell Claude: 'Write Python to reconcile Column A amounts with Sheet 2 Column A amounts and flag unmatched'
3. Python runs the match in under 2 minutes
4. Output: colour-coded Excel with only the items needing attention

IMPACT

2,000 entry BRS in 2 minutes
No manual line-by-line comparison
Old unreconciled items clearly flagged

Use Case 4: NPA Ageing & Provisioning Calculator

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: Verifying NPA classification and calculating required provision for the entire loan portfolio is the heart of bank audit. Doing it manually for 500+ accounts takes 2-3 full days.

✅ SOLUTION: Python reads the loan master data, calculates overdue days as of the balance sheet date for every account, applies IRAC classification rules, and calculates required provision. Output: account-wise classification with required vs held provision.

How to Do This (Vibe Coding Steps)

1. Export loan master with disbursement date, last payment date, outstanding balance from CBS
2. Tell Claude: 'Write Python applying IRAC norms — Sub-standard >90 days, Doubtful >12m, Loss >36m — with provision percentages'
3. Script processes all 500 accounts in under 30 seconds
4. Output: account-wise NPA flag, classification, provision required vs held, shortfall

IMPACT

500 accounts in 30 seconds
Provision shortfall identified automatically
LFAR input ready

Use Case 5: Interest Income Verification

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: Verifying that interest income has been correctly computed and recorded is critical for revenue audit. For a large branch with 800 loan accounts, manual verification is impossible.

✅ SOLUTION: Python re-computes expected interest for every loan account using the sanctioned rate and outstanding balance, then compares with interest booked in CBS. Any account where booked interest differs by more than a threshold is flagged for detailed examination.

How to Do This (Vibe Coding Steps)

1. Export loan accounts with: outstanding balance, rate, interest booking date from CBS
2. Tell Claude: 'Write Python to compute simple/compound interest for each account and compare with booked amount — flag variance > ₹1,000'
3. Python processes entire portfolio in 60 seconds
4. Output: accounts with interest underbooked or overbooked — ready for examination

IMPACT

Complete portfolio covered
Revenue leakage identified
LFAR Section on income recognition supported

Use Case 6: IRAC Compliance Checker

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: IRAC classification must be consistent across all credit products — CC, OD, Term Loan, KCC, agriculture loans, housing loans. Manual cross-checking across product types is error-prone.

✅ SOLUTION: Python applies the IRAC rule matrix across all account types simultaneously. The script has built-in rules for different product types and flags accounts where the bank's classification in CBS differs from what the rules require.

How to Do This (Vibe Coding Steps)

1. Export full credit portfolio with account type, product, overdue days, current classification from CBS
2. Tell Claude: 'Write Python with IRAC rules for CC/OD/TL/KCC/Agri/Housing. Compare CBS classification with rule output'
3. Python checks all accounts against the applicable rule for that product type
4. Output: exceptions where classification appears incorrect — for detailed audit follow-up

IMPACT

All product types covered simultaneously
Classification inconsistencies surfaced
Supports LFAR Part IV responses

Use Case 7: KYC Document Status Tracker

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: Verifying KYC compliance for all borrowers and depositors above the prescribed threshold is mandatory. Tracking document status for hundreds of accounts manually leads to gaps.

✅ SOLUTION: Python reads the KYC data export from CBS, checks mandatory field completion (PAN, Aadhaar linkage, photograph, address proof), and creates a gap report — accounts with missing or expired documents.

How to Do This (Vibe Coding Steps)

1. Export KYC master from CBS with all required fields
2. Tell Claude: 'Write Python to check which accounts have missing PAN, blank Aadhaar, photo date older than 10 years, address proof older than 2 years'
3. Script identifies all KYC gaps across the entire customer base
4. Output: KYC non-compliance report with account details — supports LFAR Section on compliance

IMPACT

100% accounts covered
KYC gaps identified systematically
Management letter point ready

Use Case 8: Stock Statement Analyser — DP Verification

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: For CC/OD accounts secured by stock, Drawing Power must be recomputed from each stock statement. With 50-100 such accounts, verifying DP manually means going through each statement individually.

✅ SOLUTION: Python reads stock statement PDFs (one per borrower), extracts stock values, applies the prescribed margin, and computes the Drawing Power. Output compares computed DP with DP sanctioned in CBS and flags accounts where sanctioned DP exceeds permissible DP.

How to Do This (Vibe Coding Steps)

1. Collect all stock statement PDFs from bank records
2. Tell Claude: 'Write Python using PDF extraction to read stock values, apply 25% margin, compute DP, compare with CBS DP'
3. Script processes all PDFs in minutes
4. Output: accounts where DP in CBS is higher than supportable DP — potential NPA risk

IMPACT

50 stock statements in 5 minutes
DP overstatement risk identified
Critical for CC/OD NPA audit

Use Case 9: Revenue Leakage Detection

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: Branches frequently undercharge or miss charging processing fees, service charges, penal interest, and renewal fees. These leakages are individually small but collectively significant and are nearly impossible to spot without systematic scanning.

✅ SOLUTION: Python reads the transaction log from CBS, identifies all accounts where a fee-charging event occurred (loan sanction, renewal, overdraft usage), and checks whether the corresponding fee was actually levied. Unlevied charges are flagged.

How to Do This (Vibe Coding Steps)

1. Export relevant transaction types from CBS for the audit period
2. Tell Claude: 'Write Python to identify all loan sanction transactions in CBS and verify a processing fee entry follows within 3 days for each'
3. Script scans entire transaction log systematically
4. Output: accounts where fee was due but not charged — total leakage quantified

IMPACT

Revenue leakage quantified precisely
LFAR Section on systems and controls supported
Management letter impact

Use Case 10: Off-Balance Sheet Exposure Report

Python Automation | Vibe Coded with Claude | Zero manual effort after setup

🔴 PROBLEM: Bank guarantees, LCs, forward contracts, and other off-balance sheet items need to be verified for proper disclosure, commission income, and adequacy of collateral. Manual tracking across products is often incomplete.

✅ SOLUTION: Python reads the OBS exposure data from CBS, classifies by product type, calculates commission due versus commission booked, checks expiry dates, and flags items approaching expiry or with commission gaps.

How to Do This (Vibe Coding Steps)

1. Export off-balance sheet register from CBS
2. Tell Claude: 'Write Python to compute expected commission on BGs and LCs by amount, rate, and period — compare with commission booked'
3. Script identifies commission underbooked and near-expiry items
4. Output: complete OBS report with commission verification — supports LFAR Part VI

IMPACT

All OBS items covered
Commission leakage identified
Expiry risk flagged
LFAR Part VI ready

Time Savings Summary — What Changes in Your 72-Hour Audit Window

Conservative estimates based on medium branch with 500 loan accounts

Task	Manual Time	With Python	Saving
Bulk PDF Downloading	3 hours	3 minutes	99%
26AS Extraction & TDS Reconciliation	4 hours	5 minutes	98%
Bank Reconciliation	6 hours	8 minutes	98%
NPA Ageing & Provisioning	16 hours	30 minutes	97%
Interest Income Verification	12 hours	45 minutes	94%
IRAC Compliance Check	8 hours	20 minutes	96%
KYC Status Tracking	4 hours	10 minutes	96%
Stock Statement / DP Analysis	6 hours	15 minutes	96%
Revenue Leakage Detection	8 hours	20 minutes	96%
Off-Balance Sheet Report	4 hours	15 minutes	94%

Total time reclaimed from 10 automation scripts: ~70 hours out of your 72-hour window. What will you do with that time?

MODULE 05

AI in the Bank Audit Process

From LFAR drafting to fraud risk identification — where AI integrates into every phase of your bank branch audit.

LFAR Drafting with Claude — From Hours to Minutes

Long Form Audit Report: the most time-consuming document in bank audit, now transformed

The Reality of LFAR Today

Most CAs copy last year's LFAR, update a few numbers, and hope the observations still apply. With Claude, you can draft every section from scratch, tailored to this year's findings, in the time it used to take to format the document.

LFAR Section / Question	How to Use Claude
Section on Credit: Appraisal process and credit monitoring	"Our branch has 500 loan accounts, 45 NPA. Appraisal follows internal credit rating. Write LFAR answer highlighting gaps in post-disbursement monitoring for NPA accounts."
Section on Deposits: Suspicious transactions	"Write LFAR answer on deposit-related suspicious transactions. Branch had 3 large cash deposits by same party on consecutive days in Q3."
Section on Systems: IT and CBS reliability	"Write LFAR answer on IT systems. CBS is Finacle. There were 2 downtime incidents this year each lasting 4 hours. No data loss reported."
Section on Compliance: KYC / AML observations	"Write LFAR observation on KYC gaps. 23 accounts found with missing Aadhaar linkage and 8 accounts with address proof older than 2 years."
Section on NPA: Provisioning adequacy	"Write LFAR answer on NPA provisioning. Computed provision: ₹45 lakhs. Branch held provision: ₹38 lakhs. Shortfall: ₹7 lakhs in doubtful category."

NPA Identification & Analysis with AI

From data to IRAC classification to LFAR input — fully automated

Python: Automated NPA Detection

- Imports full loan portfolio from CBS export
- Calculates overdue days for every account as of balance sheet date
- Applies IRAC rules by product type — different rules for CC vs TL vs KCC
- Computes required provision (15% / 25-100% / 100%)
- Flags accounts where CBS classification differs from computed classification

Claude: Analysis & LFAR

- Paste NPA summary data — Claude writes the LFAR NPA section
- Describe a borderline account — Claude advises on correct classification
- Ask about provisioning norms for restructured accounts — Claude cites the circular
- Brief Claude on top 10 NPAs — it drafts management letter observations

Common NPA Audit Question	Ask Claude / Use Perplexity
CC account overdue 85 days — is it NPA?	Claude: Not yet NPA, but should be reviewed. CC becomes NPA when outstanding > DP or overdue > 90 days — ask for the exact current circular
KCC seasonal scheme — when does overdue counting begin?	Perplexity: Latest RBI circular on KCC IRAC norms with specific harvest-season exceptions cited

Advances Portfolio Analysis with AI

Sector concentration, large exposures, and credit quality — in one view

Sector Concentration Risk

- Python reads entire loan portfolio with industry codes
- Groups exposures by sector: agriculture, real estate, MSME, retail
- Computes each sector's share of total advances
- Flags sectors exceeding RBI single-sector limits
- Output: sector exposure chart and limit compliance status

Large Borrower Analysis

- Python identifies top 20 borrowers by outstanding balance
- Extracts available collateral value for each account
- Computes security cover: collateral / outstanding balance
- Flags accounts where security cover < 1.0x
- Claude drafts the top 20 borrower section of LFAR

Evergreening Detection

- Python flags accounts where fresh disbursements closely precede repayments
- Identifies borrowers with multiple loan accounts showing mutual payment patterns
- Flags term loans that are consistently renewed without principal reduction
- Output: list of potential evergreening suspects for detailed examination
- Claude explains the red flags in plain language for management letter

Deposit Profile Analysis with AI

Inoperative accounts, suspicious transactions, and premature withdrawals

Python Automation for Deposits	Claude / AI Assistance
Inoperative accounts: Python flags all savings/current accounts with no customer-initiated transaction in 24+ months	Claude drafts the LFAR answer on inoperative accounts and unclaimed deposits transfer to RBI DEAF fund
Large cash deposits: Python identifies single-day cash deposits above ₹10 lakhs or structured deposits just below the STR threshold	Claude explains PMLA reporting obligations and drafts the KYC/AML observation for LFAR
Premature FD withdrawals: Python identifies FDs broken before maturity and verifies penalty interest levied for each	"Ask Perplexity: Latest RBI guidelines on premature FD withdrawal penalty — with circular reference"
Interest payout verification: Python re-computes FD interest payable and compares with actual interest credited	Variance report immediately identifies under/over-payment of deposit interest
Dormant account reactivation: Python checks accounts reactivated in audit period for proper authorisation	Claude: 'Write LFAR observation on dormant account reactivation procedures and gaps identified'

Fraud Risk Identification with AI

AI doesn't get tired, doesn't miss patterns, and doesn't fear awkward conversations

Why AI Excels at Fraud Detection

Frauds hide in volume. A human reviewing 5,000 transactions catches what catches the eye. Python reviews all 5,000 with the same attention. AI has no relationship with the branch manager to overlook.

Loan Fraud

- Multiple loans to same PAN/Aadhaar with different names
- Loan disbursed and repaid in same week repeatedly
- Collateral address same for unrelated borrowers
- Processing fees waived on accounts showing other irregularities

Deposit Fraud

- Large cash deposits split across multiple accounts same day
- Dormant accounts reactivated for large transactions then re-dormant
- Interest credited to accounts not matching the deposit register
- FD proceeds credited to different account than original depositor

Staff Fraud Indicators

- Transactions exclusively during lunch hours or after business hours
- Loans sanctioned by same officer showing high NPA rate
- Reversals of fee entries authorised by single official
- Password sharing indicators in CBS audit trail logs

RBI Circular Research — From Perplexity & Claude

Never cite a circular from memory. Verify it in 30 seconds with AI.

Common Bank Audit Regulatory Questions	Where to Research & What You Get
What is the current NPA provisioning rate for doubtful assets > 3 years?	Perplexity → RBI Master Circular on IRAC norms → exact percentage with circular number and date
Has RBI changed the definition of willful defaulter in 2024?	Perplexity → Latest RBI notification with amendment details and effective date with full citation
What are the income recognition restrictions for NPA accounts?	Claude (with NotebookLM if you've uploaded the circular) → clear answer from the text
PMLA threshold for STR reporting — latest position	Perplexity → FIU-IND notification or RBI circular with exact threshold and exceptions
Prudential limit for capital market exposure at branch level	Perplexity → RBI Master Direction with calculation methodology
KYC re-verification frequency for high-risk customers	Perplexity → RBI KYC Master Direction latest update with risk category differentiation
Provisioning requirement for borrower accounts under IBC	Claude → explains the provisioning treatment during CIRP vs after — with circular citation

AI for Concurrent Audit Support

Monthly audit efficiency — same tools, monthly cadence

Python Automation for Monthly Concurrent Audit

- NPA early warning: Python flags accounts crossing 30/60/89 days overdue each month before they become NPA
- Limit excess monitoring: Python checks CC/OD accounts for utilisation exceeding sanctioned limit
- Stock statement receipt: Python tracks which CC borrowers have submitted stock statements within 30 days
- Insurance expiry: Python flags loan accounts where insurance coverage is expiring within 60 days
- Renewals due: Python identifies CC/OD limits due for renewal and flags ones overdue
- Monthly BRS: Python runs the bank reconciliation comparison each month — output in 5 minutes

Claude for Monthly Report Drafting

- Paste the month's observations — Claude drafts the concurrent audit report in standard format
- Previous month's ATR: Claude compares management responses against actual compliance status
- Escalation drafting: Describe non-compliances not resolved — Claude drafts the escalation note
- Summary for principal auditor: Claude creates a concise 1-page summary from detailed findings
- Trend analysis: 'Observations in April vs May' — Claude identifies patterns and deterioration
- Management letter: Claude drafts formal management letter from the month's concurrent findings

MOC Preparation & Audit Report Drafting with Claude

From rough findings to polished, sign-ready documents

What You Give Claude	What Claude Produces
'NPA provision shortfall ₹7L in doubtful category. Branch management says will be provided next quarter. RBI norms say mandatory.'	Formal MOC entry with debit/credit, narration, regulatory basis, and recommended management response
'Interest income underbooked ₹2.3L across 8 accounts. Recomputed using Python. Management accepts the variance.'	MOC entry with income recognition basis and adjustment accounting entry
'Audit duration: 5 days. 2 staff. Branch code XYZ. No material fraud found. LFAR submitted. MOC of ₹7L provision shortfall.'	Draft audit report in standard statutory bank audit format — ready for review and sign
'3 key observations: NPA provisioning gap, KYC non-compliance 23 accounts, revenue leakage ₹1.2L in processing fees.'	Management letter with formal observations, regulatory references, and recommendation for each
'Board wants a summary of audit findings in non-technical language for audit committee presentation.'	Executive summary suitable for board/audit committee — plain language, key numbers highlighted

Management Letter Drafting with AI

Turn rough audit notes into formal, well-structured management observations

The Management Letter Challenge
A well-drafted management letter is the most valuable document you give the bank beyond the audit report. It should be specific, have regulatory backing, and recommend actionable remediation. AI helps you draft this in a fraction of the time.

Observation

Describe what you found factually — Claude writes the formal observation paragraph

Criteria

Claude adds the relevant RBI circular or regulatory provision — with citation

Effect

Quantify the impact if known — Claude frames it in business risk language

Cause

Share your assessment — Claude helps frame root cause professionally

Recommendation

Claude suggests practical remediation steps aligned with regulatory requirements

MODULE 06

Claude Inside Your Office Tools: Excel & PowerPoint

You don't leave your document. Claude comes to you. The AI lives inside the tools you already use every day.

Claude in Excel — AI Inside Your Spreadsheet

Claude sees your actual data and helps you work with it directly

What Makes This Different from a Chat Window

When you use Claude in Excel, it sees the actual data in your spreadsheet — not a description of it. This means its formula suggestions, analysis, and anomaly detection are precisely calibrated to your real numbers.

What You Ask Claude in Excel (Bank Audit)	What Claude Does
"This sheet has loan accounts with columns: Account No, Product, Outstanding, Days Overdue, Current Classification. Flag all accounts where classification looks wrong based on IRAC norms."	Reads your data, applies IRAC rules, highlights misclassified rows with explanations
"Write a formula that calculates penal interest at 2% per annum on overdue principal from Column D date to today, where overdue > 30 days."	Writes the exact Excel formula — tested against your column structure
"The VLOOKUP in Column F is returning #N/A for 30% of accounts. Look at the data and tell me why and fix it."	Diagnoses the exact cause — usually a data type mismatch — and provides the corrected formula
"Create a pivot summary from this data showing: NPA by product type, total outstanding, required provision, held provision, and shortfall — by branch."	Builds the pivot structure or a formula-based summary table directly in your sheet

Excel: NPA Provisioning with Claude

Build a complete provision computation in minutes — not hours

Step-by-Step with Claude in Excel

- Step 1: Export loan master from CBS — paste into Excel
- Step 2: Ask Claude: 'Add a column that classifies each account as Standard / Sub-standard / Doubtful 1/2/3 / Loss based on days overdue in Column E'
- Step 3: Claude adds the classification formula using nested IF — calibrated to your column
- Step 4: Ask: 'Add a provision % column — Sub-standard 15%, D1 25%, D2 40%, D3 100%, Loss 100%'
- Step 5: Claude adds the provision percentage lookup
- Step 6: Ask: 'Now compute required provision as outstanding × provision %. Summarise by class.'
- Step 7: Complete provision computation ready — compare with held provision

What You End Up With

- Account-wise classification — every account classified per IRAC rules
- Required provision per account — formula-driven, no manual calculation
- Held provision per account — from CBS data
- Shortfall / Excess per account — immediately visible
- Summary by classification category — for LFAR and MOC
- Total provision shortfall — for MOC entry
- The same template works every year — just refresh the CBS data

Excel: Interest Income Verification with Claude

Re-compute expected interest and flag revenue leakage — for the whole portfolio

What You Tell Claude in Excel	What Claude Delivers
"Column A: Account No. Column B: Outstanding Balance. Column C: Interest Rate %. Column D: Last Interest Charging Date. Write a formula for expected monthly interest."	Formula: =B2*C2/100/12 with the correct rounding — ready to copy down the full column
"Column E already has booked interest from CBS. Add a column showing variance between computed and booked interest."	Adds =E2-F2 variance column with conditional formatting: red if difference > ₹500
"Some accounts have floating rates — rate resets on 1st April each year based on RBLR. How do I compute interest accounting for the rate reset?"	Explains the IF formula approach for rate-reset dates and builds it for your specific columns
"This term loan has a moratorium period of 6 months where only interest was payable. The principal repayment started month 7. Build the full amortisation schedule."	Builds a complete amortisation table with moratorium, showing EMI, interest component, principal component, and outstanding balance for each month
"Flag accounts in this list where interest income for the year seems significantly lower than what a simple rate-on-outstanding calculation would suggest."	Highlights statistical outliers — potential income non-recognition or under-booking cases

Claude in PowerPoint — For Bank Audit Presentations

Audit committee decks, findings presentations, training material — drafted in minutes

Why CAs Spend Too Much Time on Presentations

A post-audit presentation to the bank's audit committee requires precise language, correct regulatory references, and professional formatting. With Claude in PowerPoint, you describe your findings and Claude drafts the slides. You refine and deliver.

Audit Committee Deck

Describe top 5 findings with amounts. Claude drafts each finding as a slide with observation, regulatory basis, financial impact, and management response column.

Key Findings Summary

'3 NPA observations, 1 LFAR qualification, 2 management letter points — 10-slide summary.' Claude creates the deck structure with executive-friendly language.

Training Material

'Create a 15-slide training deck on IRAC norms for our new audit staff. Audience: 2nd-year CA articles with no bank audit experience.' Claude creates it.

Annual Report Analysis

'I've given you the bank's annual report. Create 5 slides summarising key financial ratios, NPA movement, CASA ratio trend, and capital adequacy status.'

Building the Audit Committee Presentation with Claude

From raw findings to boardroom-ready slides — step by step

Your Input to Claude

'Branch XYZ. Audit period FY 2024-25. Key findings: (1) NPA provision shortfall ₹7L — 3 doubtful accounts under-provided. (2) KYC non-compliance — 23 accounts. (3) Revenue leakage ₹1.2L — processing fees not charged. Management accepts all 3. Please create an audit committee presentation of 8 slides with formal language.'

What Claude Creates

Slide 1: Executive Summary | Slide 2: Scope & Methodology | Slide 3: NPA & Provisioning Finding (observation, RBI basis, amount, management response) | Slide 4: KYC Compliance Finding | Slide 5: Revenue Leakage Finding | Slide 6: Management Action Plan | Slide 7: Prior Year ATR Status | Slide 8: Auditor's Conclusion

Your Refinement

You review each slide, add specific account details where appropriate, verify that regulatory citations are correct (use Perplexity to double-check), adjust tone to match the bank's culture, and add your firm's branding. The drafting took Claude 60 seconds. Your review takes 30 minutes.

MODULE 07

Your Action Plan: Start Today, Not Tomorrow

A 30-day roadmap to transform how you conduct bank audit — one tool at a time, zero investment required.

Your 30-Day AI Adoption Roadmap

Week by week — from zero to running your first bank audit automation

Week 1: Explore

- Create free accounts: claude.ai, chat.openai.com, perplexity.ai, notebooklm.google.com
- Upload last year's LFAR to NotebookLM — ask it 3 questions about the content
- Use Perplexity to research one RBI circular relevant to current audit
- Use Claude to draft one management letter observation from an existing finding
- Time investment: 2 hours total

Week 2: Vibe Code

- Ask Claude: 'Write Python to read my Excel loan file and flag overdue > 90 days'
- Install Python (free, 5 minutes) — run your first script
- Ask Claude to build an HTML NPA calculator — open it in Chrome
- Fix any errors by pasting them back to Claude — 2-3 iterations maximum
- Time investment: 3 hours total

Week 3: Automate

- Run the NPA ageing Python script on real loan data from a client/branch
- Ask Claude to build the interest income verification script
- Try the GSTR-2B reconciliation script from Module 4
- Share one output with your team — let them see the time difference
- Time investment: 4 hours total

Week 4: Apply in Audit

- Use Claude to draft 3 LFAR sections from your notes in the next live audit
- Use Perplexity for every RBI circular research question — no more memory-based answers
- Run the bank BRS automation script on actual audit data
- Use Claude in Excel for NPA provision computation on live data
- Time investment: Embedded in audit — no extra time

Myths vs Reality — Common Objections Answered

Every CA who is now using AI thought these same things six months ago

✗ I need to know coding to use Python

✓ You describe what you want. Claude writes the code. You run it. No coding knowledge required — ever.

✗ AI will give wrong information about RBI norms

✓ Use Perplexity for regulatory research — it cites sources so you can verify. Always cross-check AI output on regulatory matters.

✗ Client data will be stored by AI companies

✓ Do not paste client account numbers or sensitive PII into free AI tools. Use anonymised data or code references. Or use self-hosted solutions.

✗ AI will replace CAs

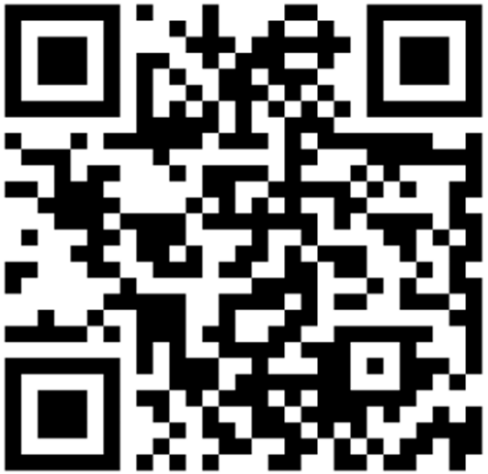
✓ AI replaces the mechanical parts of CA work. Judgment, professional scepticism, client relationships, and signing authority remain human — and become more valuable.

✗ I don't have time to learn these tools

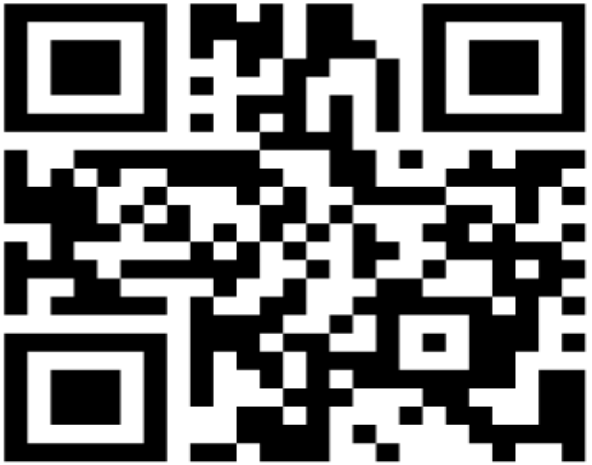
✓ The first script saves you more time than it took to create. Every subsequent month, it runs in minutes. The investment pays back in days, not months.

✗ These tools are expensive

✓ Claude, ChatGPT, NotebookLM, Gemini, and Perplexity all have generous free tiers. Python is free. You need zero budget to start.



Connect with me on Linkedin



Follow me on Youtube

THE CA WHO ADAPTS, WINS

AI does not replace the Chartered Accountant. It replaces the Chartered Accountant who refuses to use AI.

Use AI for Research

Perplexity for every RBI circular. Claude for complex analysis.

Automate Repetitive Work

One Python script this month. Save 10 hours. Run it forever.

Direct, Don't Type

You provide the judgement. AI provides the first draft. Always.

Questions, Discussion, and Live Demonstrations

CA Vivek Agarwal | S K Agrawal & Company Chartered Accountants LLP

claude.ai • chat.openai.com • perplexity.ai • notebooklm.google.com • gemini.google.com