Bancapp Automation Pvt. Ltd. — Coding Challenge: Reconciliation Intelligence

Duration: 45 minutes | Language: Python (pandas) | Deliverables: Code + Reports

Dataset provided for reconciliation scenarios :
1) API/PG vs Bank (two-way)

Objectives

- Implement robust reconciliation pipelines using pandas
- Design matching rules; identify mismatches and categorize them
- Produce clear, auditable summary reports
- Demonstrate data quality checks, exception tagging, and insights

DATASET 1: API/PG vs Bank (Two-way)

Files: dataset_api_bank/api_source.csv, dataset_api_bank/bank_settlement.csv

Columns (API): txn_id, utr, amount, txn_date, status
Columns (Bank): txn_id, utr, amount, txn_date, status, settlement_date

Tasks:

1. Ingest both files, standardize dtypes; ensure date parsing

2. Create exact-match rule on (utr, amount, txn_date)

3. Categorize recons:
   - exact_match
   - amount_mismatch
   - status_mismatch
   - missing_in_bank / missing_in_api

4. Output CSVs for each category + a summary.csv with counts and match rate

5. Compute TAT distribution: (settlement_date - txn_date) in days for matched records

6. Insights: Top 3 causes of mismatches you observe