**Prompt:**

I’m working on a GenAI hackathon project for Barclays focused on developing an AI-driven System Integration and Unified Reporting Hub. The goal is to create a centralized platform that consolidates data across Barclays’ multiple siloed systems, streamlining reporting and providing real-time, actionable insights for all departments. This platform will support functions such as ad-hoc reporting, automated data retrieval, and AI-powered insights, ultimately reducing costs and improving cross-departmental access to data for strategic decision-making.

To support this proof of concept, I need 30 specific datasets. Each dataset should be able to link to others through either customer IDs or account IDs. Please generate the datasets with realistic dummy data, using unique values and appropriate formats for fields like dates, amounts, and categories. Here are the 30 required datasets, with brief descriptions for each:

1. **Customer Demographics Table**: Basic demographics such as age, gender, location, and segmentation (e.g., Personal, Business, Corporate).

2. **Account-Customer Mapping Table**: Links accounts to customer IDs.

3. **Credit Transactions Table**: Credit transactions with type, amount, and date for the last two months.

4. **Debit Transactions Table**: Similar to the credit table but for debit transactions.

5. **Business Customer Public Information Table**: For business customers, including stakeholder count, trading address, turnover, and revenue.

6. **Customer Risk Markers Table**: Flags for risk factors like insolvency, bankruptcy, default, or high risk.

7. **Customer Complaints Table**: Customer complaints with type, date, and status.

8. **Account Available Balance Table**: Monthly balances with average, high, and low values.

9. **Customer Biometrics Session-Level Table**: Session data for customer app usage, with indicators for mobile, internet, and telephone banking, and biometric data like session duration, swipes, and clicks.

10. **Customer Model Risk Scores Table**: Risk scores for mule, fraud, scams, and money laundering behaviors.

11. **Customer Communication Preferences Table**: Preferred contact methods, times, and marketing opt-in status.

12. **Customer Financial Goals Table**: Financial goals (e.g., retirement, home buying) with target amounts, current savings, and goal horizon.

13. **Customer Behavioral Profiles Table**: Spending patterns, typical transaction times, saving habits, and average monthly spend.

14. **Account Overdraft Usage Table**: Details on overdraft usage, including frequency, amount borrowed, and fees.

15. **Customer Credit Risk Assessment Table**: Credit risk rating, history flags, and credit limits.

16. **Customer Service Interaction Table**: Customer service logs with timestamps, issue types, resolution times, and satisfaction ratings.

17. **Mortgage and Loan Repayment History Table**: Repayment records for loans, including dates, amounts, and any late payment indicators.

18. **Customer Investment Portfolio Table**: Portfolio details like investment type, value, and recent transactions.

19. **Fraud Alerts and Flags Table**: Logs of fraud alerts with alert type, detection date, and resolution status.

20. **Cross-Sell and Upsell Opportunities Table**: Product recommendations and customer responses.

21. **Customer Rewards and Loyalty Table**: Points, membership tiers, last redemption dates, and points redeemed.

22. **Customer Loan Accounts Table**: Loan account details, including type, amount, interest rate, and balance.

23. **Customer Marketing Interactions Table**: Marketing engagements like email or SMS, with responses and promoted products.

24. **Customer Account Closure Requests Table**: Account closure requests with reason, offer made, and closure status.

25. **ATM and Branch Transaction Logs Table**: In-person transactions with type, location, and amount.

26. **Customer Online Security Alerts Table**: Security alerts for online activities like failed logins and suspicious IPs.

27. **Customer Referral and Advocacy Table**: Referral activities, including referral date, status, and rewards.

28. **Customer Product Lifecycle Engagement Table**: Product lifecycle stages for each product (e.g., onboarding, active, dormant).

29. **Debt Collection and Recovery Table**: Debt recovery data, including outstanding amounts, recovery stages, and progress.

30. **Customer Satisfaction Survey Results Table**: Survey responses on service quality, product satisfaction, ease of use, and overall satisfaction.

Please create these datasets with varied data types and realistic values, ensuring they can be linked via customer or account IDs. This data will be used to demonstrate the capabilities of the AI-driven integration platform for the hackathon project.