

## **Case Study – Bank Database**

A unified system is proposed for the management of banking operations. This system is intended to cater to the needs of multiple banks. Each bank can have multiple branches. Customers can open accounts only in a specific branch. There can be multiple holders for an account. The system supports many kinds of accounts. Savings accounts are general purpose accounts on which the customers can perform different kinds of transactions like deposit and withdrawal. Basic information such as account balance is maintained for the savings account. Current account is a special kind of account that allows overdraft facility. Overdraft facility allows the account balance to go into negative up to a certain limit. Each account has a pre-assigned overdraft limit. Deposit accounts are special accounts that are meant exclusively for interest earning deposits. For each deposit, information such as the investment amount, maturity amount, maturity date, interest amount, etc. are maintained.

## Sample Data

Kubera Bank is an international bank having several thousands of customers around the world. The bank has branches in each of the four metros of India (Chennai, Mumbai, Kolkata, Delhi). Ram and Shyam are business partners. They have joint current account in the Chennai branch (account number 348573). Ram also has a savings account in the Mumbai branch (account number 984753) and so does Shyam in the Delhi branch (account number 938473). Following is a snapshot of the account statement of Ram's savings account:

Account No. 984753  
 Account Holder Name: Ram  
 Statement Period: 1-Sept-09 to 30-Sept-09  
 Account Balance: 30983.00

Date	Activity	Amount	Balance
1-Sept-09	Salary credit	20384.00	30983.00
10-Sept-09	ATM withdrawal	10000.00	20983.00
18-Sept-09	Cheque deposit	10000.00	30983.00

Use the database to answer the following questions in an unambiguous manner in plain English:

1. What is Shyam's account balance?

*Sample answer: Get Shyam's act\_id from Customer table; Using this act\_id as the key, find the record in Account table; the account balance is given by the "balance" field of this record;*

2. What type of account is 984753?

3. What is the overdraft limit on Ram's current account?