

Department of Computer Applications

18MX27 RDBMS – Lab Problem Sheet

The schema for the Bank database is given as below:

account(customer_id, account_number, branch_name, balance)

branch (branch_name, branch_city,branch_pincode)

customer (customer_id, customer_name, customer_address, customer_city)

loan (customer_id, loan_number, branch_name, loan_type, loan_amount)

1. Create all these tables considering all the constraints
2. Insert following tuples in the respective tables

Account table

<i>Customer_id</i>	<i>account_number</i>	<i>branch_name</i>	<i>Balance [in Rs.]</i>
<i>C10001</i>	<i>1423824317</i>	<i>Central Bank of India</i>	<i>1,23,500</i>
<i>C10002</i>	<i>1432675432</i>	<i>Indian Bank</i>	<i>45,650</i>
<i>C10003</i>	<i>1423562461</i>	<i>Canara Bank</i>	<i>11,23,500</i>
<i>C10004</i>	<i>1432457832</i>	<i>ICICI</i>	<i>1,45,650</i>
<i>C10005</i>	<i>1423545317</i>	<i>Central Bank of India</i>	<i>10,23,545</i>
<i>C10006</i>	<i>1432676792</i>	<i>Indian Bank</i>	<i>5,650</i>

Branch table

<i>branch_name</i>	<i>branch_city</i>	<i>branch_pincode</i>
<i>Central Bank of India</i>	<i>Chennai</i>	<i>600025</i>
<i>Indian Bank</i>	<i>Coimbatore</i>	<i>641004</i>
<i>Canara Bank</i>	<i>Erode</i>	<i>638001</i>
<i>ICICI</i>	<i>Coimbatore</i>	<i>641028</i>

Customer table

[*c10002* to *c10006* – make your own entries in the last 2 columns]

<i>customer_id</i>	<i>customer_name</i>	<i>customer_address</i>	<i>customer_city</i>
<i>C10001</i>	<i>Sankar</i>	<i>52, Ram LakshmanNagar</i>	<i>Coimbatore</i>
<i>C10002</i>	<i>Sam</i>		
<i>C10003</i>	<i>Harsha</i>		
<i>C10004</i>	<i>Madhumitha</i>		
<i>C10005</i>	<i>Pradeep</i>		
<i>C10006</i>	<i>Sanjana</i>		

Loan table

<i>Customer_id</i>	<i>loan_number</i>	<i>branch_name</i>	<i>loan_type</i>	<i>loan_amount</i>
<i>C10001</i>	<i>1200010</i>	<i>Central Bank of India</i>	<i>Personal</i>	<i>3,00,000</i>
<i>C10002</i>	<i>1400210</i>	<i>Indian Bank</i>	<i>Vechicle</i>	<i>12,00,000</i>
<i>C10003</i>	<i>1563901</i>	<i>Canara Bank</i>	<i>Home</i>	<i>43,00,000</i>
<i>C10004</i>	<i>1345457</i>	<i>ICICI</i>	<i>Education</i>	<i>9,00,000</i>
<i>C10005</i>	<i>3545317</i>	<i>Central Bank of India</i>	<i>Home</i>	<i>56,00,000</i>
<i>C10006</i>	<i>2676792</i>	<i>Indian Bank</i>	<i>Home</i>	<i>15,00,000</i>

3. Add four more rows in each of the tables.
4. Modifying the structure of the table:
 - a. Add a column *customer_pincode* to the customer and *customer_name* to the loan.
 - b. Change the size of any particular column in each of the tables.
 - c. Add a column *loan_outstandings* in the loan table.
 - d. Rename the column *loan_outstandings* as *pending_loan_amount*
 - e. Add a new column *branch_assets* in the branch table keeping minimum assets value as Rs, 2 crores.
5. Retrieving records form the table:

- a. List all accounts details of a particular branch.
 - b. List all loans with amount $> \text{Rs. } 50,000$ will all necessary details
 - c. List all accounts of particular branch with balance $< \text{Rs. } 25,000$.
 - d. List number of accounts with balance between $50,000$ and $9,00,000$.
6. Update the record from the table:
- a. Change the assets of particular branch to 100000000 .
 - b. Transfer $\text{Rs. } 10000$ from one account to another account .
7. Deleting records from the table [add suitable tuples to exercise this]
- a. Delete the loan where the amount $< \text{Rs. } 10000$.
 - b. Delete the customer whose customer city is "Rameswaram"
8. Retrieving records from multiple tables:
- a. Find the customer names, loan numbers, and loan amounts, for all loans at the Particular branch.
9. LIKE with wild card characters: [add suitable tuples]
- a. Find the names of all branches with the substring 'lam'.
 - b. Select all customer names starting with 's' 'm' 'i' 'l' 'e'.
 - c. Select all branch name with cities not starting with 'p' 'u' 'n'.
10. Ordering the display of tuples:
- a. List the loan data ordered by decreasing amount.
 - b. List the balance data ordered by decreasing balance

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