**ADVABNCED DATABASE MANAGEMENT SYSTEM**

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**Section:D**

*customer ->* Customer\_name,Customer\_street, Customer\_city

*branch* -> Branch\_name, Branch\_city, Assets

*account -> Account\_number, Bruch\_name, Balance*

*depositor -> Customer\_name, Account\_number*

*loan -> Loan\_number, Branch\_name, Ammount*

*borrower -> Customer\_name, Loan\_number*

1. Find the names & cities of all borrowers

2. Find the names & cities of customers who have a loan at "Perryridge" branch

3. Find the customers with accounts at a branch where "Hayes" has an account

4. Find the names of branch whose assets are greater than the asstes of some branch in "Brooklyn"

5. Show the name of branches having at least one account,with average balances of account at each branch ,if that average is above 700

6. Show the Names of the branch having the largest average balance

7. Find the name and branch name of the borrower

8. Find the customers who have a loan in downtown branch

9. Find the customer with loan number at a branch where jonshon has a loan

10.Find the number of borrower in each branch

11. Find the customers name who borrows the maximum amount

12. Find the customers name, their city and loan amount that they borrow

**13. Find the** average balance of all customers in "Harrison" having at least two account.

1. Find the names & cities of all borrowers

SELECT DISTINCT customer.Customer\_name, customer.Customer\_city

FROM borrower

JOIN customer ON borrower.Customer\_name = customer.Customer\_name

2. Find the names & cities of customers who have a loan at "Perryridge" branch

SELECT DISTINCT customer.Customer\_name, customer.Customer\_city

FROM borrower

JOIN customer ON borrower.Customer\_name = customer.Customer\_name

JOIN loan ON borrower.Loan\_number = loan.Loan\_number

JOIN branch ON loan.Branch\_name = branch.Branch\_name

WHERE branch.Branch\_name = 'Perryridge'

3. Find the customers with accounts at a branch where "Hayes" has an account

select distinct D.customer\_name

from depositor D, account A

where D.account\_number = A.account\_number and

branch\_name in

(select branch\_name

from depositor Dh, account Ah

where Dh.account\_number = Ah.account\_number and D.customer\_name = 'Hayes');

4. Find the names of branch whose assets are greater than the asstes of some branch in "Brooklyn"

select distinct T.branch\_name

from branch T, branch S

where T.assets > S.assets and S.branch\_city = 'Brooklyn';

5. Show the name of branches having at least one account,with average balances of account at each branch ,if that average is above 700

select branch\_name, avg(balance)

from account

group by branch\_name

having avg(balance) > 700;

6. Show the Names of the branch having the largest average balance

select branch\_name

from account

group by branch\_name

having avg(balance) >= all(select avg(balance)

from account group by branch\_name);

7. Find the name and branch name of the borrower

SELECT customer.Customer\_name, loan.Branch\_name

FROM customer

JOIN borrower ON customer.Customer\_name = borrower.Customer\_name

JOIN loan ON borrower.Loan\_number = loan.Loan\_number;

8. Find the customers who have a loan in downtown branch

SELECT DISTINCT Customer\_name

FROM borrower JOIN loan ON borrower.Loan\_number = loan.Loan\_number

JOIN branch ON loan.Branch\_name = branch.Branch\_name

WHERE branch.Branch\_city = 'downtown';

9. Find the customer with loan number at a branch where jonshon has a loan

SELECT customer.Customer\_name

FROM customer JOIN depositor ON customer.Customer\_name = depositor.Customer\_name

JOIN account ON depositor.Account\_number = account.Account\_number

JOIN loan ON account.Branch\_name = loan.Branch\_name

JOIN borrower ON loan.Loan\_number = borrower.Loan\_number

WHERE borrower.Customer\_name = 'jonshon' AND customer.Customer\_name = borrower.Customer\_name;

10.Find the number of borrower in each branch

SELECT account.Branch\_name, COUNT(DISTINCT borrower.Customer\_name) AS Number\_of\_borrowers

FROM account JOIN depositor ON account.Account\_number = depositor.Account\_number

JOIN borrower ON depositor.Customer\_name = borrower.Customer\_name

GROUP BY account.Branch\_name;

11. Find the customers name who borrows the maximum amount

SELECT customer.Customer\_name

FROM customer

JOIN borrower ON customer.Customer\_name = borrower.Customer\_name

JOIN loan ON borrower.Loan\_number = loan.Loan\_number

WHERE loan.Amount = (

SELECT MAX(Amount)

FROM loan

);

12. Find the customers name, their city and loan amount that they borrow

SELECT customer.Customer\_name, customer.Customer\_city, loan.Amount

FROM customer

JOIN borrower ON customer.Customer\_name = borrower.Customer\_name

JOIN loan ON borrower.Loan\_number = loan.Loan\_number;

**13. Find the** average balance of all customers in "Harrison" having at least two account.

SELECT AVG(account.Balance)

FROM account

JOIN depositor ON account.Account\_number = depositor.Account\_number

JOIN customer ON depositor.Customer\_name = customer.Customer\_name

WHERE customer.Customer\_city = 'Harrison'

GROUP BY customer.Customer\_name

HAVING COUNT(account.Account\_number) >= 2;