Bangladesh University of Business and Technology



LAB REPORT

Experiment Date:

Experiment No: 05

Course Title : Database System

Course Code : CSE 208

Experiment Name:

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Intake: 47

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Program: B.Sc. in CSE

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Date of Submission:

1. Find the total no. of loans from "Loan" relation from each branch.

Ans:-

Code:-SELECT branch_name, COUNT(*) AS total_loans

FROM loan_relation

GROUP BY branch name;

Output:-



branch_name	total_loans
Downtown	2
Mianus	1
Perryrdge	1
Perryridge	1
Redwood	1
Round Hill	1

2.Find the 2nd letter of customer_city for the branch_name "Downtown".

Ans:-

code:-SELECT DISTINCT SUBSTRING(c.customer_city, 2, 1) AS second_letter

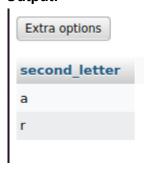
FROM customer_relation c

JOIN borrower_relation b ON c.customer_name = b.customer_name

JOIN loan_relation I ON b.loan_number = I.loan_number

WHERE I.branch_name = 'Downtown';

Output:-



3.Retrieve loan details for customer whose name contains "it" anywhere

Ans:-

Code:- SELECT I.*

FROM loan_relation I

JOIN borrower_relation b ON I.loan_number = b.loan_number

WHERE b.customer_name LIKE '%it%';

Output:-

Extra options

loan_number	branch_name	amount
L-11	Round Hill	900
L-23	Redwood	2000

4. Find the number of loans given for each loan amount

Ans:-

Code:-SELECT amount, COUNT(*) AS loan_count

FROM loan_relation

GROUP BY amount;

Output:-

Extra options

amount loan_count	
500	1
900	1
1000	1
1300	1
1500	2
2000	1

5. Find customer who have not taken any loans.

Ans:-

Code:-SELECT c.customer_name

FROM customer_relation c

LEFT JOIN borrower_relation b ON c.customer_name = b.customer_name

WHERE b.loan_number IS NULL;

Output:-

Extra options



6. Find the branches where more than one customer has taken a loan.

Ans:-

Code:-SELECT I.branch_name

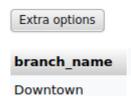
FROM loan_relation I

JOIN borrower relation b ON I.loan number = b.loan number

GROUP BY I.branch name

HAVING COUNT(DISTINCT b.customer_name) > 1;

Output:-



7. Find the customer street who has taken multiple loans.

Ans:

Code:-SELECT c.customer_street

FROM customer_relation c

JOIN borrower_relation b ON c.customer_name = b.customer_name

GROUP BY c.customer street

HAVING COUNT(DISTINCT b.loan_number) > 1;

Output:-

