Bangladesh University of Business and Technology

LAB REPORT

Experiment Date :
Experiment No : 05
Course Title : Database System
Course Code : CSE 208
Experiment Name:

Submitted By:

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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:-

Extra options

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 l ON b.loan_number = l.loan_number
WHERE l.branch_name = 'Downtown';
Output:-

Extra options

second_letter
a
r

3.Retrieve loan details for customer whose name contains “it” anywhere
Ans:-
Code:- SELECT l.*
FROM loan_relation l
JOIN borrower_relation b ON l.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

customer_name
Brooks
Glenn
Green
Lindsay
Turner

6.Find the branches where more than one customer has taken a loan.
Ans:-
Code:-SELECT l.branch_name
FROM loan_relation l
JOIN borrower_relation b ON l.loan_number = b.loan_number
GROUP BY l.branch_name
HAVING COUNT(DISTINCT b.customer_name) > 1;
Output:-

Extra options

branch_name
Downtown

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:-

Extra options

customer_street
Main
North