

Bangladesh University of Business and Technology



LAB REPORT

Experiment Date :

Experiment No : 04

Course Title : Database System

Course Code : CSE 208

Experiment Name:

Submitted By:

Name : Md. Shakib Khan Anoy

ID No : 20244203066

Intake : 47

Section : 2

Program : B.Sc. in CSE

Submitted To:

Name : Zobaer Al Khalil Zihad

(Lecturer)

Dept. of CSE

**Bangladesh University of
Business & Technology**

Date of Submission :

1. Count each loan number in customer relation.

Ans:

Code: SELECT loan_number, COUNT(customer_name) AS count FROM borrower_relation
GROUP BY loan_number;

Output:

Extra options	
loan_number	count
L-11	1
L-14	1
L-15	1
L-16	1
L-17	2
L-23	1
L-93	1

2. Show the branch name that contains “p” at the beginning and “e” at the end.

Ans:-

Code:- SELECT branch_name FROM loan_relation WHERE branch_name LIKE 'p%e';

Output:-

Extra options	
← T →	
branch_name	
<input type="checkbox"/> Edit Copy Delete	Perryrdge
<input type="checkbox"/> Edit Copy Delete	Perryridge
↑ <input type="checkbox"/> Check all With selected: Edit Copy Delete	

3. Find the number of customer from all cities in “customer” relation.

Ans:-

Code:-SELECT customer_city, COUNT(customer_city) AS customer_count FROM customer_relation GROUP BY customer_city;

Output:-

Extra options

customer_city	customer_count
Brooklyn	1
Harrison	2
Palo Alto	1
Pittsfield	2
Princeton	1
Rye	2
Stamford	2
Woodside	1










4. Find the total amount of loan from “Loan” relation of each branch which amount is greater than 1200.

Ans:

Code:SELECT amount FROM loan_relation GROUP BY amount HAVING amount >1200;

Output: -

Extra options

	amount
<input type="checkbox"/>  Edit  Copy  Delete	1300
<input type="checkbox"/>  Edit  Copy  Delete	1500
<input type="checkbox"/>  Edit  Copy  Delete	2000

5. Retrieve the names of customers who have taken out loans from more than one branch.

Ans:

Code:-SELECT br.customer_name FROM borrower_relation br
JOIN loan_relation lr ON br.loan_number = lr.loan_number
GROUP BY br.customer_name
HAVING COUNT(DISTINCT lr.branch_name) > 1;

Output:-

Extra options

customer_name

Smith

6. Find the total amount of loans taken by each customer who lives in the city of “RYE”.

Ans:-

Code:-SELECT c.customer_name, SUM(CAST(l.amount AS DECIMAL)) AS total_loan_amount
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 c.customer_city = 'Rye'
GROUP BY c.customer_name;

Output:-

customer_name	total_loan_amount
Curry	500
Smith	2900