DBMS LAB 05 TASKS AND SOLUTIONS

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March 1, 2020

Note: Write down your commands and errors encountered in a notepad file to be evaluated.

1 SQL QUERIES

1. What is the number of customers whose name starts with 'S'?

```
SELECT COUNT(*)AS NUM FROM CUSTOMER WHERE NAME LIKE 'S%';
```

2. What is the name of the agent who is assigned to the customer with cust_id=C00013?

```
SELECT CUST_CODE, CUST_NAME, AGENT_NAME FROM CUSTOMER, AGENTS WHERE CUSTOMER.AGENT_CODE
= AGENTS.AGENT_CODE AND CUST_CODE = 'C00013';
```

3. Which customer has the highest opening amount?

```
SELECT CUST_NAME, OPENING_AMT FROM CUSTOMER WHERE OPENING_AMT = (SELECT MAX(OPENING_AMT)FROM
CUSTOMER);
```

4. Show the names of the customers and their corresponding agents in such a way that customers with the same agents are displayed one after another.

```
SELECT CUST_NAME, AGENT_NAME FROM CUSTOMER, AGENTS WHERE CUSTOMER.AGENT_CODE=AGENTS.AGENT_CODE
ORDER BY AGENT_NAME;
```

5. Which customers have Santakumar as their agent?

```
SELECT CUST_NAME, AGENT_NAME FROM CUSTOMER, AGENTS WHERE CUSTOMER.AGENT_CODE = AGENTS.AGENT_COD
AND AGENTS.AGENT_CODE = (SELECT AGENT_CODE FROM AGENTS WHERE AGENT_NAME IN 'Santakumar');
```

6. What is the number of customers each agent serves?

```
SELECT AGENT_NAME, COUNT(*)FROM CUSTOMER, AGENTS WHERE CUSTOMER.AGENT_CODE=AGENTS.AGENT_CODE
GROUP BY AGENT_NAME;
```

7. Which customer of London has the lowest outstanding amount?

```
SELECT CUST_NAME, CUST_CITY, OUTSTANDING_AMT FROM CUSTOMER WHERE CUST_CITY IN 'London'AND
OUTSTANDING_AMT = (SELECT MIN(OUTSTANDING_AMT)FROM CUSTOMER);
```

8. Which customer names start with 'A'?

```
SELECT CUST_NAME FROM CUSTOMER WHERE CUST_NAME LIKE 'A%';
```

9. How many citizens work in Chennai?

```
SELECT (SELECT COUNT(*)FROM CUSTOMER WHERE WORKING_AREA IN 'Chennai')+ (SELECT COUNT(*)FROM
AGENTS WHERE WORKING_AREA IN 'Chennai')AS TOTAL_COUNT FROM DUAL;
```

10. What is the number of customers residing in London?

```
SELECT COUNT(*)FROM CUSTOMER WHERE CUST_CITY IN 'London';
```

11. Display the number of customers in each city.

```
SELECT CUST_CITY, COUNT(*)FROM CUSTOMER GROUP BY CUST_CITY;
```

12. Display the city names with the highest number of customers.

```
SELECT CUST_CITY, NUM FROM (SELECT CUST_CITY, COUNT(*)AS NUM FROM CUSTOMER GROUP BY
CUST_CITY)WHERE NUM = (SELECT MAX(NUM)FROM (SELECT CUST_CITY, COUNT(*)AS NUM FROM
CUSTOMER GROUP BY CUST_CITY));
```

13. What is the number of customers having 'i' in their name?

```
SELECT COUNT(*)CUSTOMER WHERE CUST_NAME LIKE '%i%';
```

14. What is the number of customer cities with 'ew' in their name?

```
SELECT COUNT(*)FROM CUSTOMER WHERE CUST_CITY LIKE '%ew%';
```

15. Make a list that will show the number of customers under each grade.

```
SELECT GRADE, COUNT(*)FROM CUSTOMER GROUP BY GRADE;
```

16. What is the average outstanding amount for the customers of New York?

```
SELECT AVG(OUTSTANDING_AMT)FROM CUSTOMER WHERE CUST_CITY IN 'New York';
```

17. Find the total outstanding amount of high tier customers (i.e. opening amount>6000) under each grade, if there are at least 3 customers under that grade.

```
SELECT GRADE, SUM(OUTSTANDING_AMT)FROM CUSTOMER WHERE OPENING_AMT>6000 GROUP BY GRADE
HAVING COUNT(*)>=3;
```