SET 2

1. **select all employees in department 10 whose salary is greater than 3000. [table: employee]**

Ans: select \* from employee where salary > 3000 and deptno = 10;

**2. The grading of students based on the marks they have obtained is done as follows:**

**40 to 50 -> Second Class**

**50 to 60 -> First Class**

**60 to 80 -> First Class**

**80 to 100 -> Distinctions**

1. **How many students have graduated with first class?**

Ans: select count(\*) from students where marks between 50 and 80;

1. **How many students have obtained distinction? [table: students]**

Ans: select count(\*) from students where marks between 80 and 100

**3. Get a list of city names from station with even ID numbers only. Exclude duplicates from your answer.[table: station]**

Ans: select distinct city from station where mod(id,2)=0

**4. Find the difference between the total number of city entries in the table and the number of distinct city entries in the table. In other words, if N is the number of city entries in station, and N1 is the number of distinct city names in station, write a query to find the value of N-N1 from station.**

**[table: station]**

Ans: select count(city) - count(distinct city) from station as cities;

**5. Answer the following**

**a. Query the list of CITY names starting with vowels (i.e., a, e, i, o, or u) from STATION. Your result cannot contain duplicates. [Hint: Use RIGHT() / LEFT() methods ]**

**Your result cannot contain duplicates. [Hint: Use RIGHT() / LEFT() methods ]**

Ans: select distinct city from station where city like 'a%' or city like 'e%' or city like 'i%' or city like 'o%' or city like 'u%' or city like 'A%' or city like 'E%' or city like 'I%' or city like 'O%' or city like 'U%';

**b. Query the list of CITY names from STATION which have vowels (i.e., a, e, i, o, and u) as both their first and last characters. Your result cannot contain duplicates.**

Ans: select distinct city from station where city like '[A,E,I,O,U]%[A,E,I,O,U]';

**c. Query the list of CITY names from STATION that do not start with vowels. Your result cannot contain duplicates.**

Ans: select distinct city from station where city not like 'a%' or city not like 'e%' or city not like 'i%' or city not like 'o%' or city not like 'u%' or city not like 'A%' or city not like 'E%' or city not like 'I%' or city not like 'O%' or city not like 'U%';

**d. Query the list of CITY names from STATION that either do not start with vowels or do not end with vowels. Your result cannot contain duplicates. [table: station]**

Ans: select distinct city from station where city not like '[A,E,I,O,U]%[A,E,I,O,U]';

**6. Write a query that prints a list of employee names having a salary greater than $2000 per month who have been employed for less than 36 months. Sort your result by descending order of salary. [table: emp]**

Ans: select emp\_no,first\_name,last\_name, salary from emp where '2021-10-23'-hire\_date<1095 and salary > 2000 order by emp\_no asc;

**7. How much money does the company spend every month on salaries for each department? [table: employee]**

**Expected Result**

**----------------------**

**+--------+--------------+**

**| deptno | total\_salary |**

**+--------+--------------+**

**| 10 | 20700.00 |**

**| 20 | 12300.00 |**

**| 30 | 1675.00 |**

+--------+--------------+

Ans: select total\_salary, deptno from employee group by deptno;

**8. How many cities in the CITY table have a Population larger than 100000.** [table: city]

Ans: select count(name) from city where population>100000;

**9. What is the total population of California? [table: city]**

Ans: select sum(population) from city where district = 'California'

**10. What is the average population of the districts in each country? [table: city]**

Ans: select avg(population) from city group by country;

**11. Find the ordernumber, status, customernumber, customername and comments for all orders that are ‘Disputed= [table: orders, customers]**

SELECT ordernumber, status, customernumber,

Customername, comments FROM orders

group by ordernumber

order by satus = Disputed;