

For example, if they weight 100 to 109 they are placed in the 100 weight group, 110-119 = 110 weight group, etc.

```
SELECT
  COUNT(*) AS patients_in_group,
  FLOOR(weight / 10) * 10 AS weight_group
FROM patients
GROUP BY weight_group
ORDER BY weight_group DESC;
```

Ques -5

Each admission costs \$50 for patients without insurance, and \$10 for patients with insurance. All patients with an even patient_id have insurance.

Give each patient a 'Yes' if they have insurance, and a 'No' if they don't have insurance. Add up the admission_total cost for each has_insurance group.

```
WITH InsuranceStatus AS (
  SELECT
    patient_id,
    CASE
      WHEN patient_id % 2 = 0 THEN 'Yes'
      ELSE 'No'
    END AS has_insurance,
    CASE
      WHEN patient_id % 2 = 0 THEN 10
      ELSE 50
    END AS admission_cost
  FROM Patients
)
SELECT has_insurance, SUM(admission_cost) AS admission_total
FROM InsuranceStatus
GROUP BY has_insurance;
```

Frequently asked Interview Questions (will discuss at the end) -

What is the difference between WHERE and HAVING?

Write a query to fetch the second highest salary from a table.(Using subquery/Limit offset/Rank)

Inner Join/Left Join/Right Join/Outer Join

Find the number of employees in each department.

What are keys (Primary key, Candidate Key, Alternate Key, Foreign Key, Composite key, Super key,)

What are PRIMARY KEY and UNIQUE constraints?

What is a VIEW in SQL?

Write a query to fetch top 3 highest-paid employees.(Use limit offset/Rank)

Difference between DELETE, TRUNCATE, and DROP?

What is an entity-relationship diagram (ERD)?

What is normalization? Why is it important?What are the various forms of Normalization?

Explain different types of relationships amongst tables in a DBMS.

What are tuples and attributes in DBMS?

Find employees who earn more than the average salary.

Difference between UNION and UNION ALL?

What is the DISTINCT keyword in sql?

What is the purpose of the GROUP BY clause in SQL?

What are indexes?What is the difference between a clustered and non-clustered index?

What are ACID properties in a transaction?

What is Pattern Matching in SQL?(Wildcard)

What are the differences between OLTP and OLAP?

- DDL (Data Definition Language): CREATE, ALTER, DROP, TRUNCATE.
- DML (Data Manipulation Language): SELECT, INSERT, UPDATE, DELETE.
- DCL (Data Control Language): GRANT, REVOKE.
- TCL (Transaction Control Language): COMMIT, ROLLBACK, SAVEPOINT.