SQL

What is a unique key – Identifies a single row in a table, null values are allowed

What is a foreign key – maintains a link between two tables

Data integrity – Accuracy and consistency of data

Clustered index – store data sorted, alters the way data is stored much faster than unclustered index

What are the different types of joins – left, right, full (all records), inner (both)

**What is normalization?**

Normalization is the process of minimizing redundancy and dependency by organizing fields and table of a database. The main aim of Normalization is to add, delete or modify field that can be made in a single table.

An index is a performance tuning method- creates an entry for each row

**What is the difference between DELETE and TRUNCATE commands?**

DELETE command is used to remove rows from the table, and WHERE clause can be used for conditional set of parameters. Commit and Rollback can be performed after delete statement.

TRUNCATE removes all rows from the table. Truncate operation cannot be rolled back.

OLTP = real time transactions – used to store stream of data – Insert update delete

OLAP – retrieval of data for analysis

Truncate works on rows

Drop works on tables

Employee with highest salary

Select \* from employee where salary = (select \* from max(salary)) \*\*\* Subquery in the where

select salary from employee where rowcount() = 2 order by salary desc

select salary from employee where salary no in (select max(salary) from employee)

HACKER RANK

SELECT concat(NAME,concat("(",concat(substr(OCCUPATION,1,1),")"))) FROM OCCUPATIONS ORDER BY NAME ASC;

SELECT "There are total ", count(OCCUPATION), concat(lower(occupation),"s.") FROM OCCUPATIONS GROUP BY OCCUPATION ORDER BY count(OCCUPATION) ASC;