SQL Interview Questions

1. What are Constraints in SQL?

Constrains are used to specify the rules concerning data in the table. It can be applied for single or multiple fields in an SQL table during the creation of the table or after creating using the ALTER TABLE command.

The constraints are:

- **NOT NULL** - Restricts NULL value from being inserted into a column.

- **CHECK** - Verifies that all values in a field satisfy a condition.

- **DEFAULT** - Automatically assigns a default value if no value has been specified for the field.

- **UNIQUE** - Ensures unique values to be inserted into the field.

- **INDEX** - Indexes a field providing faster retrieval of records.

- **PRIMARY KEY** - Uniquely identifies each record in a table.

- **FOREIGN KEY** - Ensures referential integrity for a record in another table.

2. What is a Primary Key?

The PRIMARY KEY constraint uniquely identifies each row in a table. It must contain UNIQUE values and has an implicit NOT NULL constraint.

A table in SQL is strictly restricted to have one and only one primary key, which is comprised of single or multiple fields (columns).

1. Create table with a single field as primary key:

```
CREATE TABLE Students (ID INT NOT NULL,
Name VARCHAR (255), PRIMARY KEY (ID))
```

2. Create table with multiple fields as primary key:

```
CREATE TABLE Students1 (ID INT NOT NULL,
LastName VARCHAR (255), FirstName VARCHAR (255),
NOT NULL, PRIMARY KEY (ID, FirstName))
```