Module 6

1- The View Structure:

- A “View” is an empty shell of a table definition.
- It does not store the data itself but dynamically represent the data from the underlying tables.
- It stores no data until it is queried.
- View can also be called as “virtual table”.
- Each time the view is queried the underlying query that populates the query is executed.

Usage of views:

- Security, confidentiality, maintenance
  The view keeps that data hidden from the unauthorized person.
- Complexity
  The view keeps the complex SQL protected from the unauthorized and and inexperienced users.

2- The Case Statement:

Like IF THEN ELSE in other programming languages.

Syntax:

```
CASE
      WHEN  < condition_1 >  THEN  < result_1 >
      WHEN  < condition_2 >  THEN  < result_2 >
      WHEN  < condition_3 >  THEN  < result_3 >
      ELSE  < else_result >
END
```

Example:

```
Select productid, productName, unitprice
CASE
    WHEN unitprice < 20  THEN  ‘Economy’
    WHEN unitprice <80   THEN  ‘Standard’
     ELSE  ‘Premeium’
END  category
```

```
From products;
```

3- IDENTITY constraint:

The identity constraint is used to auto-generate unique numbers for column, typically the primary key. It is commonly used when you need a column to have a common unique value without manually incrementing it.

- Automatically generates a **unique number** for each new row.
- Only one IDENTITY column per table.
- Cannot be manually inserted/updated unless overridden.
- Typically used for **Primary Keys**.

```
CREATE TABLE employees (
  id INT GENERATED BY DEFAULT AS IDENTITY PRIMARY KEY,
  name VARCHAR(50),
  salary DECIMAL(10,2)
);
```