

1. Explain different types of views. Demonstrate with suitable examples.

Catalog View

Dynamic Management View

User Defined Views

Simple View

2. What is the difference between function and stored procedure? Write syntax for creating functions and stored procedures.

The function must return a value but in Stored Procedure it is optional. Even a procedure can return zero or n values. Functions can have only input parameters for it whereas Procedures can have input or output parameters. Functions can be called from Procedure whereas Procedures cannot be called from a Function.

3. What is an index in SQL? What are the different types of indexes in SQL?

- Clustered Index
- Non-Clustered Index
- Column Store Index
- Filtered Index
- Hash Index
- Unique Index

4. Showcase an example of exception handling in SQL stored procedure.

```
USE [master]
```

```
GO
```

```
DECLARE
```

```
    @Number1 int,
```

```
    @Number2 int,
```

```
    @Result real
```

```
SET @Number1=10
```

```
SET @Number2=0
```

```
BEGIN TRY
```

```
    SET @Result=@Number1/@Number2
```

```
    PRINT(@Result)
```

```
END TRY
BEGIN CATCH
    PRINT('You cannot divide a number by zero')
END CATCH
```

5. Create a SQL function to split strings into rows on a given character?
Input String: Stephen;peter;berry;Olivier;caroline;

```
SELECT INSTR (Fruit, 'berry')

FROM Food

WHERE Fruit = 'strawberry';
```