

## Data Definition Questions: (using SQL **NOT** GUI)

1. Create a table named "Employees" with columns for ID (integer), Name (varchar), and Salary (decimal).

```
create table Employees(  
  ID int primary key,  
  Name varchar(50),  
  Salary decimal,  
)
```

2. Add a new column named "Department" to the "Employees" table with data type varchar(50).

```
alter table Employees add Department varchar(50);
```

3. Remove the "Salary" column from the "Employees" table.

```
alter table Employees drop column Salary;
```

4. Rename the "Department" column in the "Employees" table to "DeptName".

```
exec sp_rename 'Employees.Department' , 'DeptName', 'COLUMN';
```

5. Create a new table called "Projects" with columns for ProjectID (integer) and ProjectName (varchar).

```
create table Projects
(
ProjectID    int primary key,
ProjectName  varchar(50),
)
```

6. Add a primary key constraint to the "Employees" table for the "ID" column.

```
alter table Employees add primary key (ID);
```

7. Add a unique constraint to the "Name" column in the "Employees" table.

```
alter table Employees add unique(Name)
```

8. Create a table named "Customers" with columns for CustomerID (integer), FirstName (varchar), LastName (varchar), and Email (varchar), and Status (varchar).

```
create table Customers
(
CustomerID    int ,
FirstName     varchar(50),
LastName      varchar(50),
Email         varchar(50),
Status        varchar(50)
)
```

9. Add a unique constraint to the combination of "FirstName" and "LastName" columns in the "Customers" table.

```
alter table Customers add unique(FirstName,LastName)
```

10. Create a table named "Orders" with columns for OrderID (integer), CustomerID (integer), OrderDate (datetime), and TotalAmount (decimal).

```
create table Orders  
(  
    OrderID    int ,  
    CustomerID int ,  
    OrderDate  datetime,  
    TotalAmount decimal  
)
```

11. Add a check constraint to the "TotalAmount" column in the "Orders" table to ensure that it is greater than zero.

```
alter table Orders add check(TotalAmount > 0)
```

12. Create a schema named "Sales" and move the "Orders" table into this schema.

```
create schema Sales  
alter schema Sales transfer dbo.Orders
```

13. Rename the "Orders" table to "SalesOrders."

```
exec sp_rename 'Sales.Orders' , 'SalesOrders';
```