Instructor:

- Mr. Nazeef Ul Haq and Mr. Nauman Babar

Learning Objectives:

- Understanding of DDL commands.

Helping Material:

1. Important DDL Statements

The most important DDL statements in SQL are following:

- **CREATE DATABASE** - creates a new database

```
CREATE DATABASE databasename;
```

- **ALTER DATABASE** - modifies a database

```
DROP DATABASE databasename;
```

- **CREATE TABLE** - creates a new table

```
CREATE TABLE table_name (
    column1 datatype NOT NULL/ IDENTITY(1,1)/ UNIQUE/ Primary Key,
    column2 datatype,
    column3 datatype CHECK (condition),
    PRIMARY KEY (column_name), (You can also make primary key in this way)
    FOREIGN KEY (column_name) REFERENCES Table(column_name) (You can make foreign key in
this way)
   ....
);
CREATE TABLE new_table_name AS
    SELECT column1, column2,...
    FROM existing_table_name
    WHERE ....;
OR
SElECT * Into <DestinationTableName> FROM <SourceTableName> WHERE condition;
```

- **ALTER TABLE** - modifies a table

```
ALTER TABLE table_name
ADD column_name datatype;
DROP COLUMN column_name;
ALTER COLUMN column_name datatype;
ADD CONSTRAINT PK_Person PRIMARY KEY (Column1,Column2)
ADD Column_name datatype FOREIGN KEY REFERENCES Table_name(column_name)
ADD CONSTRAINT df_City DEFAULT 'Sandnes' FOR City;
ALTER COLUMN City DROP DEFAULT;
```

- **DROP TABLE** - deletes a table

```
DROP TABLE table_name;
TRUNCATE TABLE table_name;
```

- **CREATE INDEX** - creates an index (search key)

```
CREATE INDEX/UNIQUE INDEX index_name ON table_name (column1, column2, ...);
CREATE INDEX idx_pname ON Table_name (LastName, FirstName);
```

- **DROP INDEX** - deletes an index

```
DROP INDEX table_name.index_name;
```

- **BackUp Database**

```
BACKUP DATABASE databasename TO DISK = 'filepath\file_name.bak';
BACKUP DATABASE databasename TO DISK = 'filepath' WITH DIFFERENTIAL;
```

What to Submit:

- Nothing ☺