



**Instructor:**

- Mr. Nazeef Ul Haq (Lab)

**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:**

You are required to submit the following files.

- Text file to Lab mid exam in the same format that your text file name should be your registration number, e.g. 2021-CS-01.txt.
- Difference between Drop, Delete, and Truncate.