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| **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.