Quick revision on creating database with files (create database school with 1 primary files, 2 secondary files and one transaction log)

```
create database school
on
primary (name=schooldata1,
         filename='E:\SD\school1.mdf',
         size=10MB,
         maxsize=15MB,
         filegrowth=20%) ,
              (name=schoolsecondary,
          filename='E:\SD\school2.ndf',
          size=3MB) ,
         (name=schoolsecondary1,
            filename='E:\SD\school3.ndf',
            size=3MB)


log on
        (name=schoollog1,
         filename='E:\SD\school4.ldf',
         size=3MB,
         maxsize=5MB,
         filegrowth=1MB)
```

/*Altering the school database*/

/*add file*/

```
alter database school

add file (name=schoolsecondary,

        filename='E:\SD\school3.ndf',

        size=3MB)
```

/*modify file*/

```
alter database school

 modify file (name='schoollog', size=15MB)
```

/*remove file*/

```
alter database school

remove file schoolsecondary
```

/*droping the school database*/

```
Drop database school
```

/*to know information*/

exec sp_helpdb

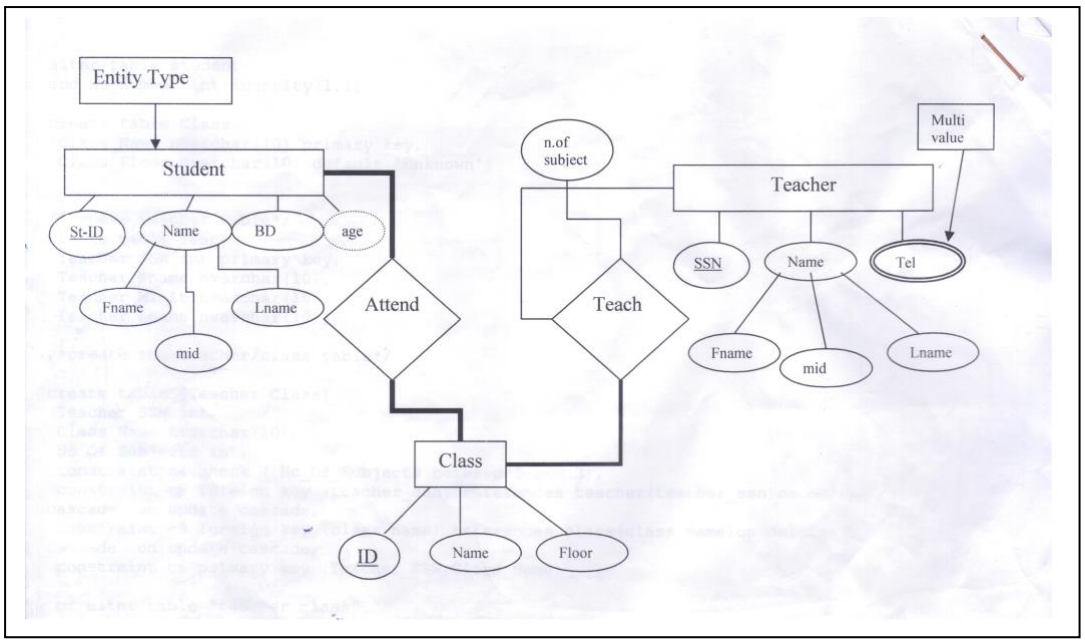
exec sp_helpdb 'school'

exec sp_helpfile 'schooldata'

exec sp_helpfile 'schoollog'

exec sp_helpfilegroup 'NewFG'

/*Performing the DDL on the school DB tables*/



SQL Server Data Types (briefly mention the most important types)

String data types:

Data type	Description
char(n)	Fixed width character string
varchar(n)	Variable width character string
varchar(max)	Variable width character string
text	Variable width character string
nchar	Fixed width Unicode string

nvarchar	Variable width Unicode string
nvarchar(max)	Variable width Unicode string
ntext	Variable width Unicode string
binary(n)	Fixed width binary string
varbinary	Variable width binary string
varbinary(max)	Variable width binary string
image	Variable width binary string

Number data types:

Data type	Description
bit	Integer that can be 0, 1, or NULL
tinyint	Allows whole numbers from 0 to 255
smallint	Allows whole numbers between -32,768 and 32,767
int	Allows whole numbers between -2,147,483,648 and 2,147,483,647
bigint	Allows whole numbers between -9,223,372,036,854,775,808 and 9,223,372,036,854,775,807
smallmoney	Monetary data from -214,748.3648 to 214,748.3647
money	Monetary data from -922,337,203,685,477.5808 to 922,337,203,685,477.5807
float	Floating precision number data from -1.79E + 308 to 1.79E + 308.
real	Floating precision number data from -3.40E + 38 to 3.40E + 38

Date data types:

Data type	Description
datetime	From January 1, 1753 to December 31, 9999 with an accuracy of 3.33 milliseconds
datetime2	From January 1, 0001 to December 31, 9999 with an accuracy of 100 nanoseconds
smalldatetime	From January 1, 1900 to June 6, 2079 with an accuracy of 1 minute
date	Store a date only. From January 1, 0001 to December 31, 9999

time	Store a time only to an accuracy of 100 nanoseconds
datetimeoffset	The same as datetime2 with the addition of a time zone offset
timestamp	Stores a unique number that gets updated every time a row gets created or modified. The timestamp value is based upon an internal clock and does not correspond to real time. Each table may have only one timestamp variable

/*creat student table*/

```
use school

create table Student

(Student_ID int not null,

 Student_Fname nvarchar(10),

 Student_Mname nvarchar(10),

 Student_Lname nvarchar(10),

 Student_Bdate datetime)
```

/*add column to student*/

```
use school

alter table Student

add mail nvarchar(10)
```

/*remove column from the student*/

```
use school

alter table student

drop column mail
```

/*add datatype*/

exec sp_addtype number**,**'int'**,** 'not null'

OR

Create Type number **From** int **Not NULL**

/*test the datatype added*/

use school

alter table student

add st_fax number

/*remove the datatype*/

use school

alter table student drop column st_fax

use school

exec sp_droptype number

OR

Drop Type number

/*remove the student table*/

use school

Drop table student

/*to know info about the student table*/

use school

exec sp_help Student