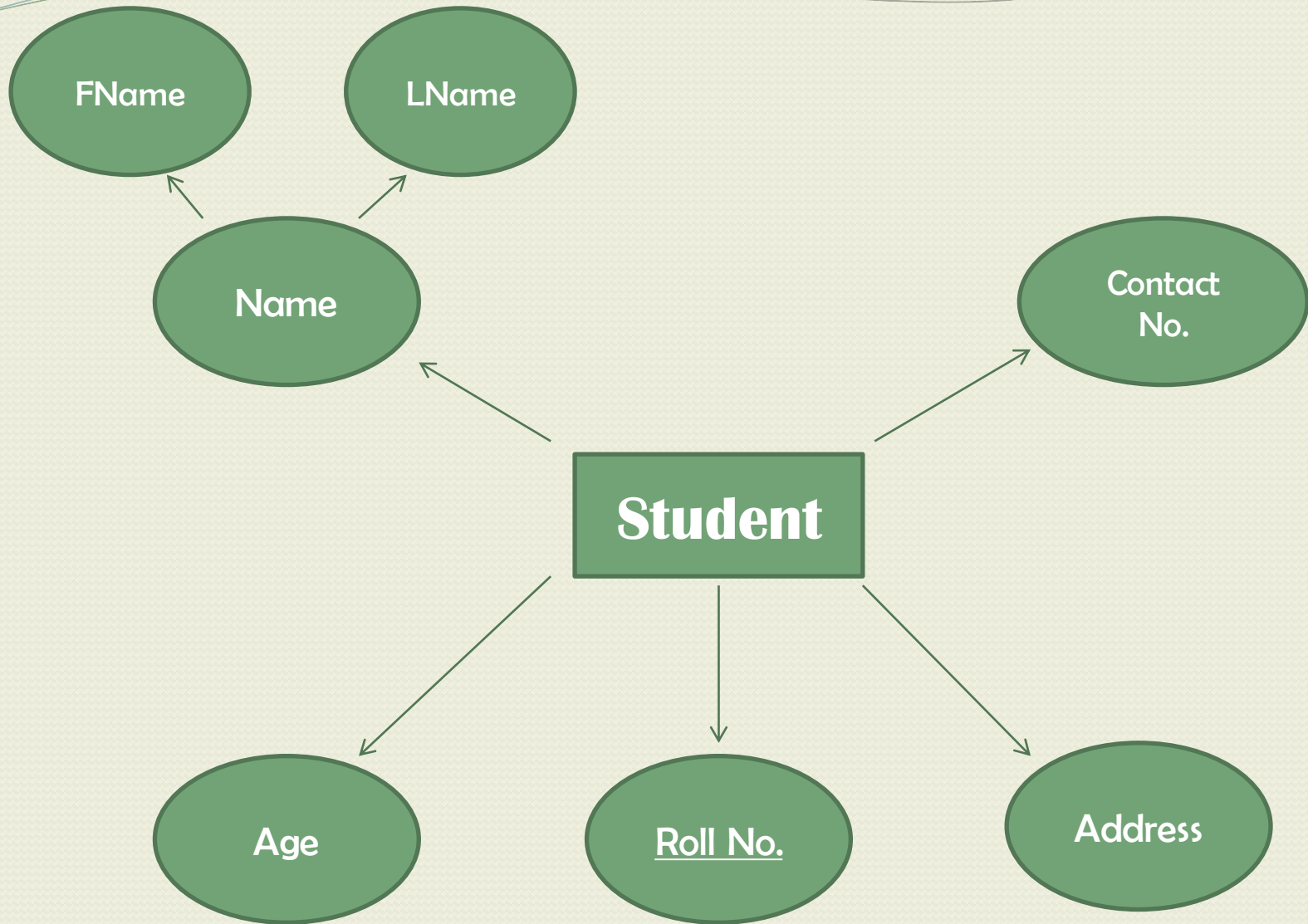Name   –   Yash Rane (734)
              Pratik Mhatre (724)

Class   – TYBSc (Statistics)

Subject – Applied Component (Statistics Paper5)

Topic   – Student Management System

FName

LName

Name

Contact No.

Student

Age

Roll No.

Address

SQL Syntax Function –

1.) Create a Table for students containing data of their admission using Create Table Command and Use Primary Key Function
Insert 10 records in the table and display them
Using Select * from Table command

Syntax –
Create Table STUDENT (RollNo number(3) primary key not null,
FName varchar2(10) not null, LName varchar2(10),
Age INT not null, Address char(15) not null,
Contact INT not null);

Type this syntax into your SQL Database and press ENTER key. It will create a table named 'STUDENT'

<u>**Values to be Inserted in the Table –**</u>

INSERT INTO STUDENT VALUES (101, 'YASH', 'RANE', 20, 'MUMBAI', 0123456789);

INSERT INTO STUDENT VALUES (102, 'PRATIK', 'MHATRE', 20, 'MUMBAI', 1234567890);

INSERT INTO STUDENT VALUES (103, 'NISHANT', 'MHATRE', 20, 'THANE', 1234506789);

INSERT INTO STUDENT VALUES (104, 'PUSHPAK', 'BHONDE', 20, 'MUMBAI', 1234500786);

INSERT INTO STUDENT VALUES (105, 'SANDESH', 'JADHAV', 20, 'MUMBAI', 1023456420);

INSERT INTO STUDENT VALUES (106, 'DHANRAJ', 'PANWAR', 20, 'NAVI MUMBAI', 1234564200);

INSERT INTO STUDENT VALUES (107, 'ASHISH', 'PATIL', 20, 'PALGHAR', 1234056042);

INSERT INTO STUDENT VALUES (108, 'KEDAR', 'JADHAV', 20, 'PUNE', 1234506400);

INSERT INTO STUDENT VALUES (109, 'VIRAT', 'KOLHI', 20, 'DELHI', 1818181818);

INSERT INTO STUDENT VALUES (110, 'SACHIN', 'TENDULKAR', 20, 'MUMBAI', 1001001001);

Alternate and Efficient way using Ampersand –
SYNTAX - INSERT INTO STUDENT VALUES (&ROLLNO, '&FNAME', '&LNAME', &AGE, '&ADDRESS', &CONTACT);

If we want to alter the above table like adding or removing something from the table, then we use the **Alter Table Command** –
alter table STUDENT add Unique (Contact No);

To update someone's name in the table, use the update command
update STUDENT set Fname = '_____' where RollNo = _____;

To arrange the name in alphabetical order use the command –
Select Lname from STUDENT where name like 'a%';

To identify the students taking admission in college are from Mumbai use the Command –
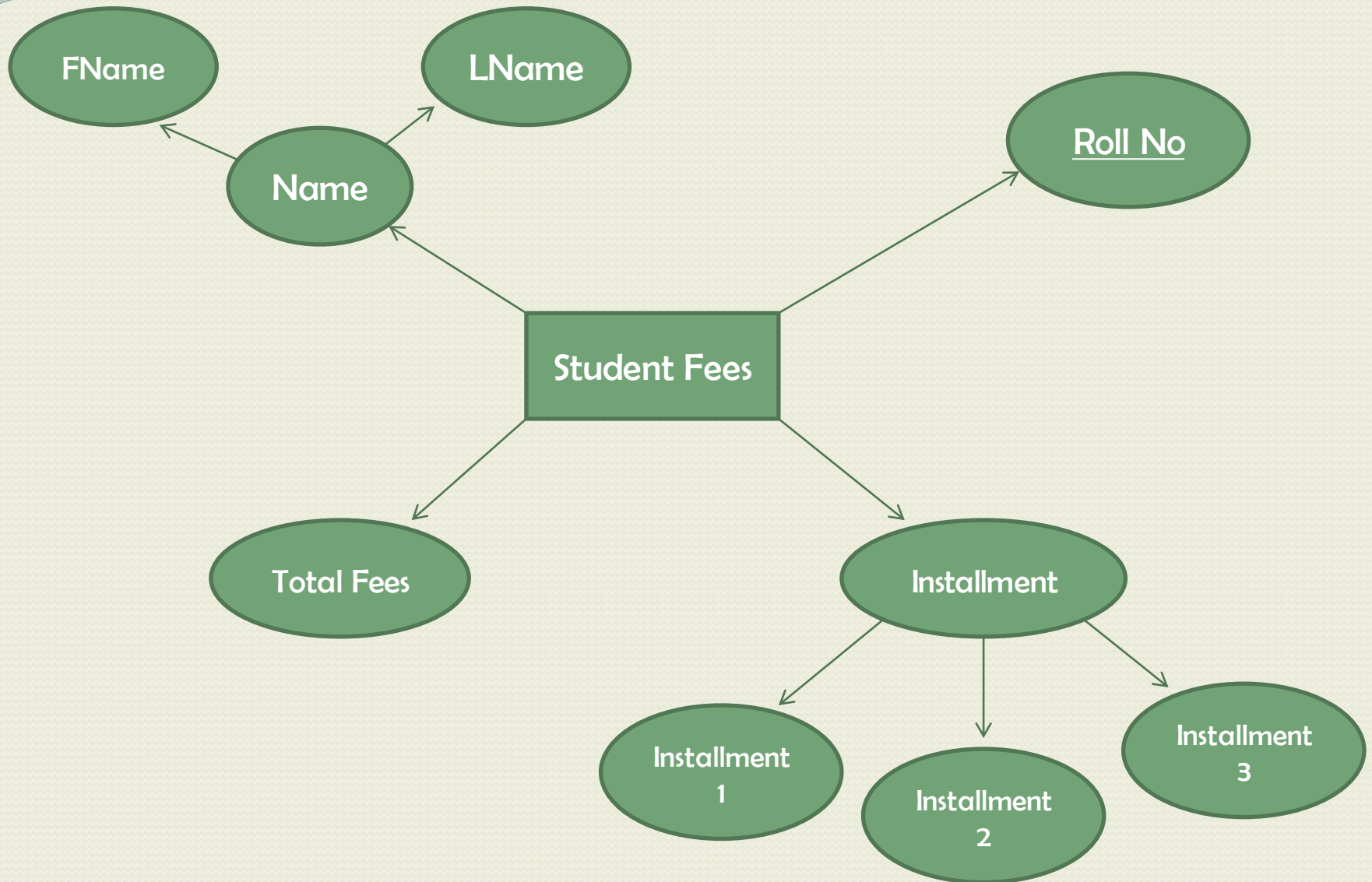**Select * from STUDENT where city = 'Mumbai'**

Execute Select Command –

SELECT * FROM STUDENT;

After applying Select command, we get the output as given below -

```
ROLLNO FNAME       LNAME          AGE ADDRESS              CONTACT
--------- ---------- ---------- ---------- ---------------- ----------
    101 YASH        RANE            20 MUMBAI            123456789
    102 PRATIK      MHATRE          20 MUMBAI           1234567890
    103 NISHANT     MHATRE          20 THANE            1234506789
    104 PUSHPAK     BHONDE          20 MUMBAI           1234500786
    105 SANDESH     JADHAV          20 MUMBAI            123456420
    106 DHANRAJ     PANWAR          20 NAVI MUMBAI      1234564200
    107 ASHISH      PATIL           20 PALGHAR            12345642
    108 KEDAR       JADHAV          20 PUNE              123456400
    109 VIRAT       KOLHI           20 DELHI            1818181818
    110 SACHIN      TENDULKAR       20 MUMBAI           1001001001
```

To get information about specific student -
Use **Select * from STUDENT where RollNo = 107;**

2.) Create a Table for students containing data of the payment of admission fees using Create Table Command and Use Primary Key Function.
Insert 10 records in the table and display them
Using Select * from Table command.

Syntax –
CREATE TABLE STUDENTFEES(
Rollno   number (3) primary key not null,
FName varchar (10) not null,
LName varchar (10) ,
Totalfees number (5) not null,
Installment char not null,
Inst1 number (5) not null,
Inst2 number (5) not null,
Inst3 number (5) not null
);

Values to be Inserted in the Table –

INSERT INTO STUDENTFEES VALUES (201, 'YASH', 'RANE', 16450, 'N', 0, 0, 0);

INSERT INTO STUDENTFEES VALUES (202, 'PRATIK', 'MHATRE', 16450, 'Y', 5483, 5483, 5484);

INSERT INTO STUDENTFEES VALUES (203, 'NISHANT', 'MHATRE', 16450, 'N', 0, 0, 0);

INSERT INTO STUDENTFEES VALUES (204, 'PUSHPAK', 'BHONDE', 16450, 'N', 0, 0, 0);

INSERT INTO STUDENTFEES VALUES (205, 'SANDESH', 'JADHAV', 16450, 'N', 0, 0, 0);

INSERT INTO STUDENTFEES VALUES (206, 'DHANRAJ', 'PANWAR', 16450, 'Y', 5483, 5483, 5484);

INSERT INTO STUDENTFEES VALUES (207, 'ASHISH', 'PATIL', 16450, 'Y', 5483, 5483, 5484);

INSERT INTO STUDENTFEES VALUES (208, 'KEDAR', 'JADHAV', 16450, 'Y', 5483, 5483, 5484);

INSERT INTO STUDENTFEES VALUES (209, 'VIRAT', 'KOLHI', 16450, 'Y', 5483, 5483, 5484);

INSERT INTO STUDENTFEES VALUES (210, 'SACHIN', 'TENDULKAR', 16450, 'N', 0, 0, 0);

Alternate and Efficient way using Ampersand –
INSERT INTO STUDENT VALUES (&ROLLNO, '&FNAME', '&LNAME', &TOTALFEES, &INSTALLMENT',
&Inst1, &Inst2, &Inst3);

Execute Select Command –

SELECT * FROM STUDENTFEES;

After applying Select command, we get the output as given below -

```
ROLLNO FNAME       LNAME       TOTALFEES I     INST1      INST2      INST3
---------- ---------- ---------- ---------- - ---------- ---------- ----------
     201 YASH        RANE          16450 N         0          0          0
     202 PRATIK      MHATRE        16450 Y      5483       5483       5484
     203 NISHANT     MHATRE        16450 N         0          0          0
     204 PUSHPAK     BHONDE        16450 N         0          0          0
     205 SANDESH     JADHAV        16450 N         0          0          0
     206 DHANRAJ     PANWAR        16450 Y      5483       5483       5484
     207 ASHISH      PATIL         16450 Y      5483       5483       5484
     208 KEDAR       JADHAV        16450 Y      5483       5483       5484
     209 VIRAT       KOLHI         16450 Y      5483       5483       5484
     210 SACHIN      TENDULKAR     16450 N         0          0          0
```

To update data use –
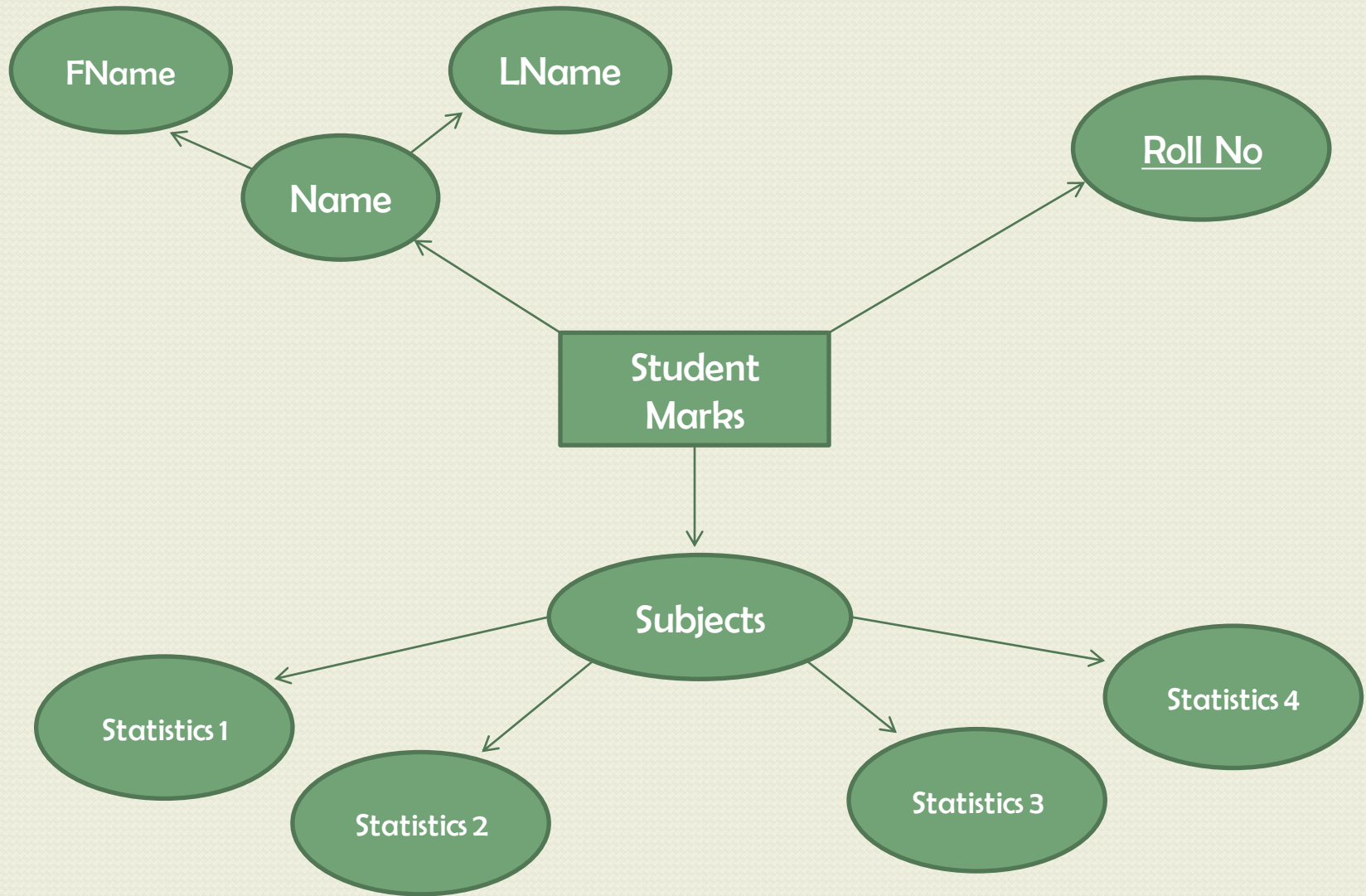Update STUDENTFEES set INST1 = 5483 where Rollno = _____;
Arrange Names in a particular order -
select name from STUDENTFEES where name like 'a%';
To get information about specific student -
Use Select * from STUDENTFEES where RollNo = 207

ER Diagram for the above Syntax

3.) Create a Table for students containing data of the their marks obtained in examination using Create Table Command and Use Primary Key Function.
Insert 10 records in the table and display them
Using Select * from Table command.

Syntax –
CREATE TABLE STUDENTMARKS(
Rollno number (3) primary key not null,
Name varchar (16) not null,
stat1 number(3) not null check(stat1<=100),
stat2 number(3) not null check(stat2<=100),
stat3 number(3) not null check(stat3<=100),
stat4 number(3) not null check(stat4<=100),
);

<u>**Values to be Inserted in the Table –**</u>

INSERT INTO STUDENTMARKS VALUES (301, 'YASH RANE', 70, 63, 59, 72);

INSERT INTO STUDENTMARKS VALUES (302, 'PRATIK MHATRE', 68, 60, 49, 80);

INSERT INTO STUDENTMARKS VALUES (303, 'NISHANT MHATRE', 80, 76, 68, 83);

INSERT INTO STUDENTMARKS VALUES (304, 'PUSHPAK BHONDE', 92, 86, 82, 90);

INSERT INTO STUDENTMARKS VALUES (305, 'SANDESH JADHAV', 65, 52, 58, 69);

INSERT INTO STUDENTMARKS VALUES (306, 'DHANRAJ PANWAR', 84, 50, 53, 64);

INSERT INTO STUDENTMARKS VALUES (307, 'ASHISH PATIL', 42, 59, 56, 65);

INSERT INTO STUDENTMARKS VALUES (308, 'KEDAR JADHAV', 72, 60, 58, 69);

INSERT INTO STUDENTMARKS VALUES (309, 'VIRAT KOLHI', 42, 60, 56, 49);

INSERT INTO STUDENTMARKS VALUES (310, 'SACHIN TENDULKAR', 80, 91, 96, 89);

Alternate and Efficient way using Ampersand –
INSERT INTO STUDENT VALUES (&ROLLNO, '&NAME', &Stat1, &Stat2, &Stat3, &Stat4);

Execute Select Command –

SELECT * FROM STUDENTMARKS;

After applying Select command, we get the output as given below -

```
ROLLNO NAME                      STAT1      STAT2      STAT3      STAT4
---------- -------------------- ---------- ---------- ---------- ----------
       301 YASH RANE               70         63         59         72
       302 PRATIK MHATRE           68         60         49         80
       303 NISHANT MHATRE          80         76         68         83
       304 PUSHPAK BHONDE          92         86         82         90
       305 SANDESH JADHAV          65         52         58         69
       306 DHANRAJ PANWAR          84         50         53         64
       307 ASHISH PATIL            42         59         56         65
       308 KEDAR JADHAV            72         60         58         69
       309 VIRAT KOLHI             42         60         56         49
       310 SACHIN TENDULKAR        80         91         96         89
```
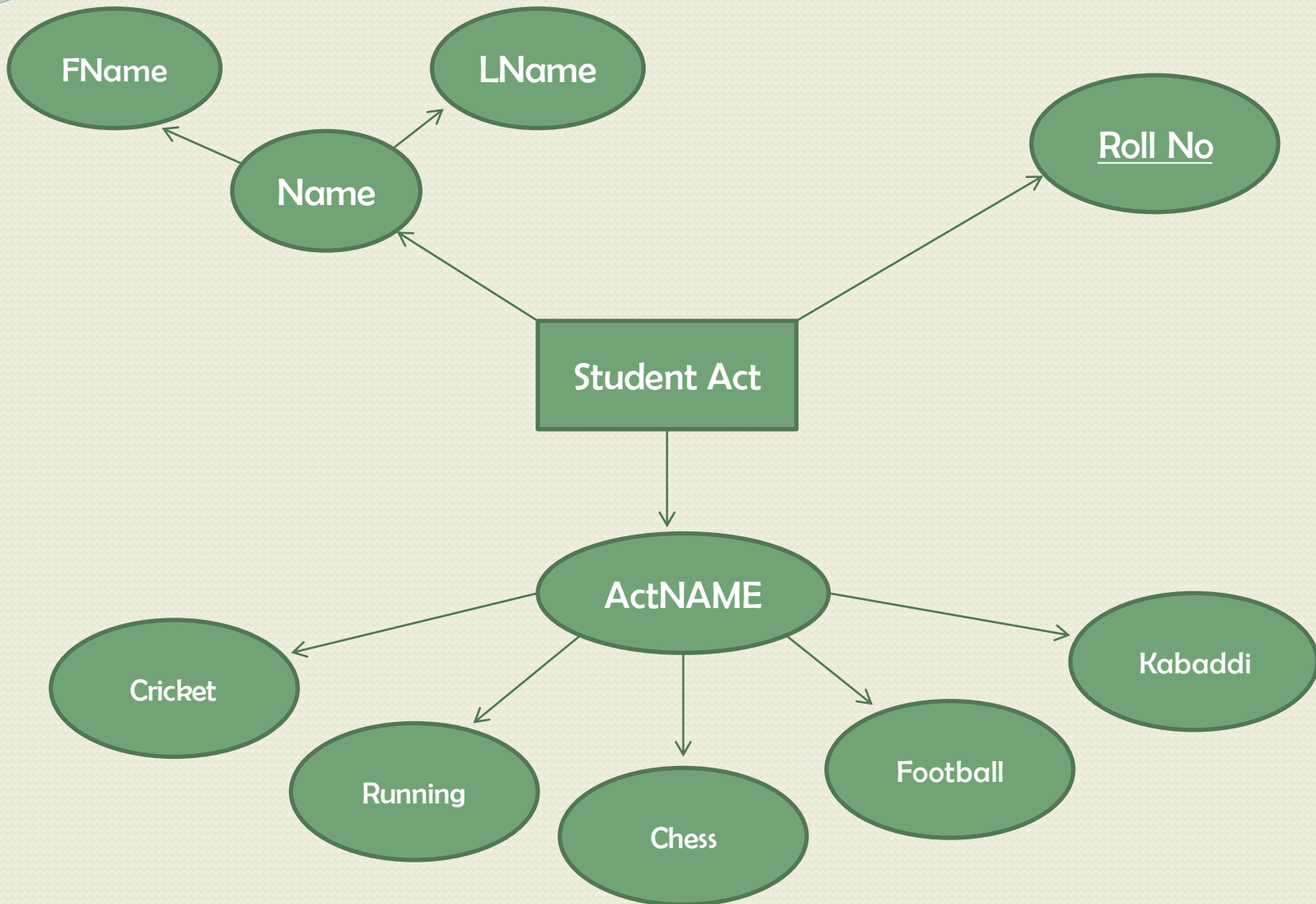
update STUDENTMARKS set Stat4 = 60 where FName = '___'
To get information about specific student -
Use Select * from STUDENT where RollNo = 307

ER Diagram for the above Syntax

4.) Create a Table for students containing data of the their co-curricular activities in which they are involved using Create Table Command and Use Primary Key Function.
Insert 10 records in the table and display them
Using Select * from Table command.

Syntax –
CREATE TABLE STUDENTACT(Rollno number(3) primary key not null,
Name varchar2(16) not null,
ActName varchar2(10) not null);

Values to be Inserted in the Table –

INSERT INTO STUDENTACT VALUES (401, 'YASH RANE', 'CRICKET');

INSERT INTO STUDENTACT VALUES (402, 'PRATIK MHATRE', 'CHESS');

INSERT INTO STUDENTACT VALUES (403, 'NISHANT MHATRE', 'KABADDI');

INSERT INTO STUDENTACT VALUES (404, 'PUSHPAK BHONDE', 'FOOTBALL');

INSERT INTO STUDENTACT VALUES (405, 'SANDESH JADHAV', 'CRICKET');

INSERT INTO STUDENTACT VALUES (406, 'DHANRAJ PANWAR', 'FOOTBALL');

INSERT INTO STUDENTACT VALUES (407, 'ASHISH PATIL', 'RUNNING');

INSERT INTO STUDENTACT VALUES (408, 'KEDAR JADHAV', 'KABADDI');

INSERT INTO STUDENTACT VALUES (409, 'VIRAT KOLHI', 'CRICKET');

INSERT INTO STUDENTACT VALUES (410, 'SACHIN TENDULKAR', 'CRICKET');

Alternate and Efficient way using Ampersand –
INSERT INTO STUDENT VALUES (&ROLLNO, '&NAME', &Stat1, &Stat2, &Stat3, &Stat4);

Execute Select Command –

SELECT * FROM STUDENTACT;

After applying Select command, we get the output as given below -

```
ROLLNO NAME                ACTNAME
---------- ---------------- ----------
       401 YASH RANE         CRICKET
       402 PRATIK MHATRE     CHESS
       403 NISHANT MHATRE    KABADDI
       404 PUSHPAK BHONDE    FOOTBALL
       405 SANDESH JADHAV    CRICKET
       406 DHANRAJ PANWAR    FOOTBALL
       407 ASHISH PATIL      RUNNING
       408 KEDAR JADHAV      KABADDI
       409 VIRAT KOLHI       CRICKET
       410 SACHIN TENDULKAR  CRICKET
```

To get information about specific student -
Use Select * from STUDENT where RollNo = 407

THANK YOU…