

STUDENT

```
CREATE TABLE STUDENT
(USN VARCHAR(20) PRIMARY KEY,
 SNAME VARCHAR(25),
 ADDRESS VARCHAR(25),
 PHONE VARCHAR(10),
 GENDER CHAR(1));
```

SEMSEC

```
CREATE TABLE SEMSEC(
 SSID VARCHAR(5) PRIMARY KEY,
 SEM INT NOT NULL,
 SEC VARCHAR(8) NOT NULL);
```

CLASS

```
CREATE TABLE CLASS (
  USN VARCHAR(20),
  SSID VARCHAR(5), FOREIGN KEY(USN) REFERENCES STUDENT(USN), FOREIGN KEY(SSID)
  REFERENCES SEMSEC(SSID));
```

SUBJECT

```
CREATE TABLE SUBJECT(
 SUBCODE VARCHAR(8) PRIMARY KEY,
 TITLE VARCHAR(20),
 SEM INT NOT NULL,
 CREDITS INT );
```

IAMARKS

```
CREATE TABLE IAMARKS (
 USN VARCHAR(20),
 SUBCODE VARCHAR(8),
 SSID VARCHAR(5),
 TEST1 INT,
 TEST2 INT,
 TEST3 INT,
 FINALIA INT,FOREIGN KEY(USN)REFERENCES STUDENT(USN), FOREIGN KEY(SUBCODE)
 REFERENCES SUBJECT(SUBCODE), FOREIGN KEY(SSID) REFERENCES SEMSEC(SSID));
```

Insert into student

Values

```
('01jst20is020','hrithik','mysore','9128287223','M'),
('01jst20is021','bhuvan','apradesh','7126543919','M'),
('01jst20is024','saumya','vellore','7876452890','F'),
('01jst20is027','riya','udupi','8989567345','F'),
('01jst20is029','navneet','tumkur','8945678934','M'),
('01jst20is030','nitu','mandya','9431355749','F');
```

Insert into semsec

Values

```
('5A',5,'A'),
('3B',3,'B'),
('7A',7,'A'),
('2C',2,'C'),
('4B',4,'B'),
('4C',4,'C');
```

INSERT INTO CLASS

VALUES

```
('01jst20is020','5A'),
('01jst20is021','3B'),
('01jst20is024','7A'),
('01jst20is027','2C'),
('01jst20is029','4C'),
('01jst20is030','4C');
```

INSERT INTO SUBJECT

VALUES

```
('20IS402','DC',4,3),
('20IS202','MATHS',2,3),
('20IS501','DBMS',5,4),
('20IS502','CN',5,4),
('20IS303','DSA',3,4),
('20IS404','OS',4,4),
('20IS701','ML',7,4),
('20IS57L','DBMS_LAB',5,2);
```

INSERT INTO IAMARKS

VALUES

```
('01jst20is020','20IS501','5A',18,20,16,20),
('01jst20is021','20IS303','3B',19,16,18,19),
('01jst20is024','20IS701','7A',20,17,17,20),
('01jst20is027','20IS202','2C',15,16,18,18),
('01jst20is029','20IS402','4C',12,17,15,17),
('01jst20is030','20IS402','4C',16,16,16,16),
('01jst20is030','20IS404','4C',17,19,16,19);
```

Query1:

```
SELECT * FROM STUDENT WHERE USN IN (SELECT USN FROM CLASS WHERE SSID='4C');
```

Query 2:

```
SELECT SS.SEM,SS.SEC,S.GENDER,COUNT(S.GENDER) AS COUNT FROM STUDENT  
S,SEMSEC SS,CLASS C WHERE S.USN=C.USN  
AND SS.SSID=C.SSID GROUP BY SS.SEM,SS.SEC,S.GENDER ORDER BY  
SEM;
```

Query3:

```
CREATE VIEW USN_T1 AS SELECT SUBCODE,TEST1 FROM IAMARKS WHERE  
USN='01JST20IS030';
```

```
SELECT * FROM USN_T1;
```

Query4:

```
UPDATE IAMARKS SET FINALIA = GREATEST(TEST1+TEST2,TEST2+TEST3,TEST3+TEST1)/2  
where usn like '01jst%';
```

query5.

```
SELECT S.*, IA.SUBCODE, (CASE WHEN IA.FINALIA BETWEEN 17 AND 20 THEN  
'OUTSTANDING' WHEN IA.FINALIA BETWEEN 12 AND 16 THEN 'AVERAGE' ELSE 'WEAK'  
END) AS CAT FROM STUDENT S , IAMARKS IA WHERE S.USN = IA.USN AND IA.SSID  
LIKE '4%';
```