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

**CREATE TABLE SEMSEC(SSID VARCHAR(5) PRIMARY KEY, SEM INT(2),SEC CHAR(1));**

**CREATE TABLE CLASS (USN VARCHAR(10),SSID VARCHAR(5), PRIMARY KEY(USN,SSID),FOREIGN KEY(USN) REFERENCES STUDENT(USN), FOREIGN KEY(SSID) REFERENCES SEMSEC(SSID));**

**CREATE TABLE SUBJECT(SUBCODE VARCHAR(8) PRIMARY KEY, TITLE VARCHAR(20),SEM INT(2), CREDITS INT(2));**

**CREATE TABLE IAMARKS (USN VARCHAR(10), SUBCODE VARCHAR(8), SSID VARCHAR(5), TEST1 INT(2), TEST2 INT(2),TEST3 INT(2), FINALIA INT(3),PRIMARY KEY(USN,SUBCODE,SSID), FOREIGN KEY(USN) REFERENCES STUDENT(USN), FOREIGN KEY(SUBCODE) REFERENCES SUBJECT(SUBCODE), FOREIGN KEY(SSID) REFERENCES SEMSEC(SSID));**

**INSERT INTO STUDENT VALUES('1CG15CS001','ABHI','TUMKUR','9136256345','M');**

**INSERT INTO STUDENT VALUES('1CG15CS002','AMULYA','GUBBI','9136232233','F');**

**INSERT INTO STUDENT VALUES('1CG15ME063','CHETAN','NITTUR','9136243242','M');**

**INSERT INTO STUDENT VALUES('1CG15EC055','RAGHAVI','SSPURAM','9136256444','F');**

**INSERT INTO STUDENT VALUES('1CG15EE065','SANJAY','BANGALORE','9136252111','M');**

**INSERT INTO SEMSEC VALUES ('5A',5,'A');**

**INSERT INTO SEMSEC VALUES ('3B',3,'B');**

**INSERT INTO SEMSEC VALUES ('7A',7,'A');**

**INSERT INTO SEMSEC VALUES ('2C',2,'C');**

**INSERT INTO SEMSEC VALUES ('4B',4,'B');**

**INSERT INTO SEMSEC VALUES ('4C',4,'C');**

**INSERT INTO CLASS VALUES('1CG15CS001','5A');**

**INSERT INTO CLASS VALUES('1CG15CS002','5A');**

**INSERT INTO CLASS VALUES('1CG16ME063','3B');**

**INSERT INTO CLASS VALUES('1CG14EC055','7A');**

**INSERT INTO CLASS VALUES('1CG15EE065','3B');**

**INSERT INTO CLASS VALUES('1CG15EE065','4C');**

**INSERT INTO CLASS VALUES('1CG15CS002','4C');**

**INSERT INTO SUBJECT VALUES ('10CS81','ACA',8, 4);**

**INSERT INTO SUBJECT VALUES ('15CS53','DBMS',5, 4);**

**INSERT INTO SUBJECT VALUES ('15CS33','DS',3, 4);**

**INSERT INTO SUBJECT VALUES ('15CS34','CO',3, 4);**

**INSERT INTO SUBJECT VALUES ('15CS158','DBA',2, 4);**

**INSERT INTO SUBJECT VALUES ('10CS71','OOMD',7, 4);**

**INSERT INTO IAMARKS VALUES('1CG15CS001','15CS53','5A',18,19,15,19);**

**INSERT INTO IAMARKS VALUES('1CG15CS002','15CS53','5A',15,16,14,16);**

**INSERT INTO IAMARKS VALUES('1CG16ME063','15CS33','3B',10,15,16,16);**

**INSERT INTO IAMARKS VALUES('1CG14EC055','10CS71','7A',18,20,21,21);**

**INSERT INTO IAMARKS VALUES('1CG15EE065','15CS33','3B',16,20,17,19);**

**INSERT INTO IAMARKS VALUES('1CG15EE065','15CS53','4C',19,20,18,20);**

**Queries:**

**1.) List all the student details studying in fourth semester ‘C’ section.**

**SELECT S.USN,SNAME,ADDRESS,PHONE,GENDER FROM STUDENT S, CLASS C, SEMSEC SS WHERE SEM=4 AND SEC='C' AND SS.SSID=C.SSID AND C.USN=S.USN;**

**USN SNAME ADDRESS PHONE G**

**- 1cg15ee065 Sanjay bangalore 9538444404 M 1cg15cs002 Amulya gubbi 8896557412 F**

**2.) Compute the total number of male and female students in each semester and in each section.**

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

**3. Create a view of Test1 marks of student USN ‘1BI15CS101’ in all subjects.**

**CREATE VIEW TEST1 AS SELECT SUBCODE,TEST1 FROM IAMARKS WHERE USN='1cg15ee065';**

**SELECT \* FROM TEST1;**

**SUBCODE TEST1**

**15cs33 16**

**15cs53 19**

**4. Calculate the FinalIA (average of best two test marks) and update the corresponding table for all students.**

**SELECT \* FROM IAMARKS;**

**5.**

**SELECT S.USN,S.SNAME,S.ADDRESS,S.PHONE,S.GENDER,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,SEMSEC SS,IAMARKS IA,SUBJECT SUB WHERE S.USN=IA.USN AND SS.SSID=IA.SSID AND SUB.SUBCODE=IA.SUBCODE AND SUB.SEM=7;**

**USN SNAME ADDRESS PHONE G CAT**

**-**

**1cg14ec055 raghavi sspuram 9485675521 F WEAK**