

LAB 10
COLLEGE DATABASE

CODE:

```
CREATE TABLE STUDENT10 (  
  USN VARCHAR (10) PRIMARY KEY,  
  SNAME VARCHAR (25),  
  ADDRESS VARCHAR (25),  
  PHONE NUMBER (10),  
  GENDER CHAR (1));
```

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

```
CREATE TABLE CLASS10 (  
  USN VARCHAR (10),  
  SSID VARCHAR (5),  
  PRIMARY KEY (USN, SSID),  
  FOREIGN KEY (USN) REFERENCES STUDENT10 (USN),  
  FOREIGN KEY (SSID) REFERENCES SEMSEC (SSID));
```

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

```
CREATE TABLE IAMARKS (  
  USN VARCHAR (10),  
  SUBCODE VARCHAR (8),  
  SSID VARCHAR (5),  
  TEST1 NUMBER (2),  
  TEST2 NUMBER (2),  
  TEST3 NUMBER (2),  
  FINALIA NUMBER (2),  
  PRIMARY KEY (USN, SUBCODE, SSID),  
  FOREIGN KEY (USN) REFERENCES STUDENT10 (USN),  
  FOREIGN KEY (SUBCODE) REFERENCES SUBJECT (SUBCODE),  
  FOREIGN KEY (SSID) REFERENCES SEMSEC (SSID));
```

```
INSERT INTO STUDENT10 VALUES ('1RN13CS020','AKSHAY','BELAGAVI', 8877881122,'M');  
INSERT INTO STUDENT10 VALUES ('1RN13CS062','SANDHYA','BENGALURU',  
7722829912,'F');  
INSERT INTO STUDENT10 VALUES ('1RN13CS091','TEESHA','BENGALURU',  
7712312312,'F');
```

INSERT INTO STUDENT10 VALUES ('1RN13CS066','SUPRIYA','MANGALURU',
8877881122,'F');
INSERT INTO STUDENT10 VALUES ('1RN14CS010','ABHAY','BENGALURU',
9900211201,'M');
INSERT INTO STUDENT10 VALUES ('1RN14CS032','BHASKAR','BENGALURU',
9923211099,'M');
INSERT INTO STUDENT10 VALUES ('1RN14CS025','ASMI','BENGALURU', 7894737377,'F');
INSERT INTO STUDENT10 VALUES ('1RN15CS011','AJAY','TUMKUR', 9845091341,'M');

INSERT INTO STUDENT10 VALUES ('1RN15CS029','CHITRA','DAVANGERE',
7696772121,'F');
INSERT INTO STUDENT10 VALUES ('1RN15CS045','JEEVA','BELLARY', 9944850121,'M');
INSERT INTO STUDENT10 VALUES ('1RN15CS091','SANTOSH','MANGALURU',
8812332201,'M');
INSERT INTO STUDENT10 VALUES ('1RN16CS045','ISMAIL','KALBURGI', 9900232201,'M');
INSERT INTO STUDENT10 VALUES ('1RN16CS088','SAMEERA','SHIMOGA', 9905542212,'F');
INSERT INTO STUDENT10 VALUES ('1RN16CS122','VINAYAKA','CHIKAMAGALUR',
8800880011,'M');

INSERT INTO SEMSEC VALUES ('CSE8A', 8,'A');
INSERT INTO SEMSEC VALUES ('CSE8B', 8,'B');
INSERT INTO SEMSEC VALUES ('CSE8C', 8,'C');
INSERT INTO SEMSEC VALUES ('CSE7A', 7,'A');
INSERT INTO SEMSEC VALUES ('CSE7B', 7,'B');
INSERT INTO SEMSEC VALUES ('CSE7C', 7,'C');
INSERT INTO SEMSEC VALUES ('CSE6A', 6,'A');
INSERT INTO SEMSEC VALUES ('CSE6B', 6,'B');
INSERT INTO SEMSEC VALUES ('CSE6C', 6,'C');
INSERT INTO SEMSEC VALUES ('CSE5A', 5,'A');
INSERT INTO SEMSEC VALUES ('CSE5B', 5,'B');
INSERT INTO SEMSEC VALUES ('CSE5C', 5,'C');
INSERT INTO SEMSEC VALUES ('CSE4A', 4,'A');
INSERT INTO SEMSEC VALUES ('CSE4B', 4,'B');
INSERT INTO SEMSEC VALUES ('CSE4C', 4,'C');
INSERT INTO SEMSEC VALUES ('CSE3A', 3,'A');
INSERT INTO SEMSEC VALUES ('CSE3B', 3,'B');
INSERT INTO SEMSEC VALUES ('CSE3C', 3,'C');
INSERT INTO SEMSEC VALUES ('CSE2A', 2,'A');
INSERT INTO SEMSEC VALUES ('CSE2B', 2,'B');
INSERT INTO SEMSEC VALUES ('CSE2C', 2,'C');
INSERT INTO SEMSEC VALUES ('CSE1A', 1,'A');
INSERT INTO SEMSEC VALUES ('CSE1B', 1,'B');
INSERT INTO SEMSEC VALUES ('CSE1C', 1,'C');

INSERT INTO CLASS10 VALUES ('1RN13CS020','CSE8A');
INSERT INTO CLASS10 VALUES ('1RN13CS062','CSE8A');
INSERT INTO CLASS10 VALUES ('1RN13CS066','CSE8B');
INSERT INTO CLASS10 VALUES ('1RN13CS091','CSE8C');

```

INSERT INTO CLASS10 VALUES ('1RN14CS010','CSE7A');
INSERT INTO CLASS10 VALUES ('1RN14CS025','CSE7A');
INSERT INTO CLASS10 VALUES ('1RN14CS032','CSE7A');
INSERT INTO CLASS10 VALUES ('1RN15CS011','CSE4A');
INSERT INTO CLASS10 VALUES ('1RN15CS029','CSE4A');
INSERT INTO CLASS10 VALUES ('1RN15CS045','CSE4B');
INSERT INTO CLASS10 VALUES ('1RN15CS091','CSE4C');
INSERT INTO CLASS10 VALUES ('1RN16CS045','CSE3A');
INSERT INTO CLASS10 VALUES ('1RN16CS088','CSE3B');
INSERT INTO CLASS10 VALUES ('1RN16CS122','CSE3C');

```

```

INSERT INTO SUBJECT VALUES ('10CS81','ACA', 8, 4);
INSERT INTO SUBJECT VALUES ('10CS82','SSM', 8, 4);
INSERT INTO SUBJECT VALUES ('10CS83','NM', 8, 4);
INSERT INTO SUBJECT VALUES ('10CS84','CC', 8, 4);
INSERT INTO SUBJECT VALUES ('10CS85','PW', 8, 4);
INSERT INTO SUBJECT VALUES ('10CS71','OOAD', 7, 4);
INSERT INTO SUBJECT VALUES ('10CS72','ECS', 7, 4);
INSERT INTO SUBJECT VALUES ('10CS73','PTW', 7, 4);
INSERT INTO SUBJECT VALUES ('10CS74','DWDM', 7, 4);
INSERT INTO SUBJECT VALUES ('10CS75','JAVA', 7, 4);
INSERT INTO SUBJECT VALUES ('10CS76','SAN', 7, 4);
INSERT INTO SUBJECT VALUES ('15CS51', 'ME', 5, 4);
INSERT INTO SUBJECT VALUES ('15CS52','CN', 5, 4);
INSERT INTO SUBJECT VALUES ('15CS53','DBMS', 5, 4);
INSERT INTO SUBJECT VALUES ('15CS54','ATC', 5, 4);
INSERT INTO SUBJECT VALUES ('15CS55','JAVA', 5, 3);
INSERT INTO SUBJECT VALUES ('15CS56','AI', 5, 3);
INSERT INTO SUBJECT VALUES ('15CS41','M4', 4, 4);
INSERT INTO SUBJECT VALUES ('15CS42','SE', 4, 4);
INSERT INTO SUBJECT VALUES ('15CS43','DAA', 4, 4);
INSERT INTO SUBJECT VALUES ('15CS44','MPMC', 4, 4);
INSERT INTO SUBJECT VALUES ('15CS45','OOC', 4, 3);
INSERT INTO SUBJECT VALUES ('15CS46','DC', 4, 3);
INSERT INTO SUBJECT VALUES ('15CS31','M3', 3, 4);
INSERT INTO SUBJECT VALUES ('15CS32','ADE', 3, 4);
INSERT INTO SUBJECT VALUES ('15CS33','DSA', 3, 4);
INSERT INTO SUBJECT VALUES ('15CS34','CO', 3, 4);
INSERT INTO SUBJECT VALUES ('15CS35','USP', 3, 3);
INSERT INTO SUBJECT VALUES ('15CS36','DMS', 3, 3);

```

```

INSERT INTO IAMARKS VALUES ('1RN13CS091','10CS81','CSE8C', 15, 16, 18,16);
INSERT INTO IAMARKS VALUES ('1RN13CS091','10CS82','CSE8C', 12, 19, 14,18);
INSERT INTO IAMARKS VALUES ('1RN13CS091','10CS83','CSE8C', 19, 15, 20,18);
INSERT INTO IAMARKS VALUES ('1RN13CS091','10CS84','CSE8C', 20, 16, 19,19);
INSERT INTO IAMARKS VALUES ('1RN13CS091','10CS85','CSE8C', 15, 15, 12,13);

```

```
select * from student10;
```

```
select * from semsec;
```

```
select * from class10;
```

```
select * from subject;
```

```
select * from iamarks;
```

```
SELECT S.*, SS.SEM, SS.SEC  
FROM STUDENT10 S, SEMSEC SS, CLASS10 C  
WHERE S.USN = C.USN AND  
SS.SSID = C.SSID AND  
SS.SEM = 4 AND SS.SEC='C';
```

```
SELECT SS.SEM, SS.SEC, S.GENDER, COUNT (S.GENDER) AS COUNT  
FROM STUDENT10 S, SEMSEC SS, CLASS10 C  
WHERE S.USN = C.USN AND  
SS.SSID = C.SSID  
GROUP BY SS.SEM, SS.SEC, S.GENDER  
ORDER BY SEM;
```

```
CREATE VIEW STU_TEST1_MARKS_VIEW  
AS  
SELECT TEST1, SUBCODE  
FROM IAMARKS  
WHERE USN = '1RN13CS091';
```

```
select * from STU_TEST1_MARKS_VIEW ;
```

```
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 STUDENT10 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 = 8;
```

OUTPUT:

TABLES:

Student

	USN	SNAME	ADDRESS	PHONE	GENDER
1	1RN13CS020	AKSHAY	BELAGAVI	8877881122	M
2	1RN13CS062	SANDHYA	BENGALURU	7722829912	F
3	1RN13CS091	TEESHA	BENGALURU	7712312312	F
4	1RN13CS066	SUPRIYA	MANGALURU	8877881122	F
5	1RN14CS010	ABHAY	BENGALURU	9900211201	M
6	1RN14CS032	BHASKAR	BENGALURU	9923211099	M
7	1RN14CS025	ASMI	BENGALURU	7894737377	F
8	1RN15CS011	AJAY	TUMKUR	9845091341	M
9	1RN15CS029	CHITRA	DAVANGERE	7696772121	F
10	1RN15CS045	JEEVA	BELLARY	9944850121	M
11	1RN15CS091	SANTOSH	MANGALURU	8812332201	M
12	1RN16CS045	ISMAIL	KALBURGI	9900232201	M
13	1RN16CS088	SAMEERA	SHIMOGA	9905542212	F
14	1RN16CS122	VINAYAKA	CHIKAMAGALUR	8800880011	M

SEMSEC:

	SSID	SEM	SEC
1	CSE8A	8 A	
2	CSE8B	8 B	
3	CSE8C	8 C	
4	CSE7A	7 A	
5	CSE7B	7 B	
6	CSE7C	7 C	
7	CSE6A	6 A	
8	CSE6B	6 B	
9	CSE6C	6 C	
10	CSE5A	5 A	

	SSID	SEM	SEC
11	CSE5B	5 B	
12	CSE5C	5 C	
13	CSE4A	4 A	
14	CSE4B	4 B	
15	CSE4C	4 C	
16	CSE3A	3 A	
17	CSE3B	3 B	
18	CSE3C	3 C	
19	CSE2A	2 A	
20	CSE2B	2 B	

21	CSE2C	2 C
22	CSE1A	1 A
23	CSE1B	1 B
24	CSE1C	1 C

Class:

	USN	SSID
1	1RN13CS020	CSE8A
2	1RN13CS062	CSE8A
3	1RN13CS066	CSE8B
4	1RN13CS091	CSE8C
5	1RN14CS010	CSE7A
6	1RN14CS025	CSE7A
7	1RN14CS032	CSE7A
8	1RN15CS011	CSE4A
9	1RN15CS029	CSE4A
10	1RN15CS045	CSE4B
11	1RN15CS091	CSE4C
12	1RN16CS045	CSE3A
13	1RN16CS088	CSE3B
14	1RN16CS122	CSE3C

SUBJECT:

	SUBCODE	TITLE	SEM	CREDITS
1	10CS81	ACA	8	4
2	10CS82	SSM	8	4
3	10CS83	NM	8	4
4	10CS84	CC	8	4
5	10CS85	PW	8	4
6	10CS71	00AD	7	4
7	10CS72	ECS	7	4
8	10CS73	PTW	7	4
9	10CS74	DWDM	7	4
10	10CS75	JAVA	7	4
	SUBCODE	TITLE	SEM	CREDITS
21	15CS44	MPMC	4	4
22	15CS45	00C	4	3
23	15CS46	DC	4	3
24	15CS31	M3	3	4
25	15CS32	ADE	3	4
26	15CS33	DSA	3	4
27	15CS34	C0	3	4
28	15CS35	USP	3	3
29	15CS36	DMS	3	3

	SUBCODE	TITLE	SEM	CREDITS
11	10CS76	SAN	7	4
12	15CS51	ME	5	4
13	15CS52	CN	5	4
14	15CS53	DBMS	5	4
15	15CS54	ATC	5	4
16	15CS55	JAVA	5	3
17	15CS56	AI	5	3
18	15CS41	M4	4	4
19	15CS42	SE	4	4
20	15CS43	DAA	4	4

MARKS:

	USN	SUBCODE	SSID	TEST1	TEST2	TEST3	FINALIA
1	1RN13CS091	10CS81	CSE8C	15	16	18	(null)
2	1RN13CS091	10CS82	CSE8C	12	19	14	(null)
3	1RN13CS091	10CS83	CSE8C	19	15	20	(null)
4	1RN13CS091	10CS84	CSE8C	20	16	19	(null)
5	1RN13CS091	10CS85	CSE8C	15	15	12	(null)

QUERY:

1]

	USN	SNAME	ADDRESS	PHONE	GENDER	SEM	SEC
1	1RN15CS091	SANTOSH	MANGALURU	8812332201	M	4	C

2]

	SEM	SEC	GENDER	COUNT
1	3	A	M	1
2	3	B	F	1
3	3	C	M	1
4	4	A	F	1
5	4	A	M	1
6	4	B	M	1
7	4	C	M	1
8	7	A	F	1
9	7	A	M	2
10	8	A	F	1
11	8	A	M	1
12	8	B	F	1
13	8	C	F	1

3]

	TEST1	SUBCODE
1	15	10CS81
2	12	10CS82
3	19	10CS83
4	20	10CS84
5	15	10CS85

4]

	USN	SNAME	ADDRESS	PHONE	GENDER	CAT
1	1RN13CS091	TEESHA	BENGALURU	7712312312	F	AVERAGE
2	1RN13CS091	TEESHA	BENGALURU	7712312312	F	OUTSTANDING
3	1RN13CS091	TEESHA	BENGALURU	7712312312	F	OUTSTANDING
4	1RN13CS091	TEESHA	BENGALURU	7712312312	F	OUTSTANDING
5	1RN13CS091	TEESHA	BENGALURU	7712312312	F	AVERAGE