

```
mysql> SHOW DATABASES;
```

Database
companydatabase
information_schema
moviedatabase
mysql
performance_schema
sakila
sys
world

```
+-----+  
8 rows in set (0.00 sec)
```

```
mysql> CREATE DATABASE COLLEGEDATABASE;
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SHOW DATABASES;
```

Database
collegedatabase
companydatabase
information_schema
moviedatabase
mysql
performance_schema
sakila
sys
world

```
+-----+  
9 rows in set (0.00 sec)
```

```
mysql> USE COLLEGEDATABASE;
```

```
Database changed
```

```
mysql>
```

```
mysql> CREATE TABLE STUDENT
-> (
-> USN                CHAR(10),
-> SNAME              VARCHAR(20),
-> ADDRESS             VARCHAR(30),
-> PHONE              CHAR(10),
-> GENDER              CHAR,
-> PRIMARY KEY (USN)
-> );
```

Query OK, 0 rows affected (0.06 sec)

```
mysql> DESCRIBE STUDENT;
```

Field	Type	Null	Key	Default	Extra
USN	char(10)	NO	PRI	NULL	
SNAME	varchar(20)	YES		NULL	
ADDRESS	varchar(30)	YES		NULL	
PHONE	char(10)	YES		NULL	
GENDER	char(1)	YES		NULL	

5 rows in set (0.00 sec)

```
mysql> CREATE TABLE SEMSEC
-> (
-> SSID                CHAR(5),
-> SEM                 CHAR,
-> SEC                 CHAR,
-> PRIMARY KEY (SSID)
-> );
```

Query OK, 0 rows affected (0.03 sec)

```
mysql> DESCRIBE SEMSEC;
```

Field	Type	Null	Key	Default	Extra
SSID	char(5)	NO	PRI	NULL	
SEM	char(1)	YES		NULL	
SEC	char(1)	YES		NULL	

3 rows in set (0.00 sec)

```
mysql>
```

```
mysql> CREATE TABLE CLASS
-> (
-> USN                CHAR(10),
-> SSID               CHAR(5),
-> PRIMARY KEY (USN, SSID),
-> FOREIGN KEY (USN) REFERENCES STUDENT (USN),
-> FOREIGN KEY (SSID) REFERENCES SEMSEC (SSID)
-> );
```

Query OK, 0 rows affected (0.05 sec)

```
mysql> DESCRIBE CLASS;
```

Field	Type	Null	Key	Default	Extra
USN	char(10)	NO	PRI	NULL	
SSID	char(5)	NO	PRI	NULL	

2 rows in set (0.00 sec)

```
mysql> CREATE TABLE SUBJECT
```

```
-> (
-> SUBCODE            CHAR(7),
-> TITLE              VARCHAR(20),
-> SEM                CHAR,
-> CREDITS             CHAR,
-> PRIMARY KEY (SUBCODE)
-> );
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> DESCRIBE SUBJECT;
```

Field	Type	Null	Key	Default	Extra
SUBCODE	char(7)	NO	PRI	NULL	
TITLE	varchar(20)	YES		NULL	
SEM	char(1)	YES		NULL	
CREDITS	char(1)	YES		NULL	

4 rows in set (0.00 sec)

```
mysql>
```

```
mysql> CREATE TABLE IAMARKS
-> (
-> USN                CHAR(10),
-> SUBCODE            CHAR(7),
-> SSID               CHAR(5),
-> TEST1              INT(2),
-> TEST2              INT(2),
-> TEST3              INT(2),
-> FINALIA            INT(2),
-> PRIMARY KEY (USN, SUBCODE, SSID),
-> FOREIGN KEY (SUBCODE) REFERENCES SUBJECT (SUBCODE),
-> FOREIGN KEY (SSID) REFERENCES SEMSEC (SSID)
-> );
```

Query OK, 0 rows affected, 4 warnings (0.07 sec)

```
mysql> DESCRIBE IAMARKS;
```

Field	Type	Null	Key	Default	Extra
USN	char(10)	NO	PRI	NULL	
SUBCODE	char(7)	NO	PRI	NULL	
SSID	char(5)	NO	PRI	NULL	
TEST1	int	YES		NULL	
TEST2	int	YES		NULL	
TEST3	int	YES		NULL	
FINALIA	int	YES		NULL	

7 rows in set (0.00 sec)

```
mysql> SHOW TABLES;
```

Tables_in_collegedatabase
class
iamarks
semsec
student
subject

5 rows in set (0.00 sec)

```
mysql>
```

```
mysql> INSERT INTO STUDENT VALUES
-> ('4AD13CS020', 'AKSHAY', 'BELAGAVI', '8877881122', 'M');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD13CS062', 'SANDHYA', 'BENGALURU', '7722829912', 'F');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD13CS091', 'TEESHA', 'BENGALURU', '7712312312', 'F');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD13CS066', 'SUPRIYA', 'MANGALURU', '8877881122', 'F');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD14CS010', 'ABHAY', 'BENGALURU', '9900211201', 'M');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD14CS032', 'BHASKAR', 'BENGALURU', '9923211099', 'M');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD14CS025', 'ASMI', 'BENGALURU', '7894737377', 'F');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD15CS011', 'AJAY', 'TUMKUR', '9845091341', 'M');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD15CS029', 'CHITRA', 'DAVANGERE', '7696772121', 'F');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD15CS045', 'JEEVA', 'BELLARY', '9944850121', 'M');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD15CS091', 'SANTOSH', 'MANGALURU', '8812332201', 'M');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO STUDENT VALUES
-> ('4AD16CS045', 'ISMAIL', 'KABURGI', '9900232201', 'M');
Query OK, 1 row affected (0.00 sec)

mysql>
```

```
mysql> INSERT INTO STUDENT VALUES
-> ('4AD16CS088', 'SAMEERA', 'SHIMOGA', '9905542212', 'F');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO STUDENT VALUES
-> ('4AD16CS122', 'VINAYAKA', 'CHIKAMAGALUR', '8800880011', 'M');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> SELECT * FROM STUDENT;
```

USN	SNAME	ADDRESS	PHONE	GENDER
4AD13CS020	AKSHAY	BELAGAVI	8877881122	M
4AD13CS062	SANDHYA	BENGALURU	7722829912	F
4AD13CS066	SUPRIYA	MANGALURU	8877881122	F
4AD13CS091	TEESHA	BENGALURU	7712312312	F
4AD14CS010	ABHAY	BENGALURU	9900211201	M
4AD14CS025	ASMI	BENGALURU	7894737377	F
4AD14CS032	BHASKAR	BENGALURU	9923211099	M
4AD15CS011	AJAY	TUMKUR	9845091341	M
4AD15CS029	CHITRA	DAVANGERE	7696772121	F
4AD15CS045	JEEVA	BELLARY	9944850121	M
4AD15CS091	SANTOSH	MANGALURU	8812332201	M
4AD16CS045	ISMAIL	KABURGI	9900232201	M
4AD16CS088	SAMEERA	SHIMOGA	9905542212	F
4AD16CS122	VINAYAKA	CHIKAMAGALUR	8800880011	M

```
14 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE1A', '1', 'A');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE1B', '1', 'B');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE1C', '1', 'C');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE2A', '2', 'A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE2B', '2', 'B');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE2C', '2', 'C');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE3A', '3', 'A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE3B', '3', 'B');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE3C', '3', 'C');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE4A', '4', 'A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE4B', '4', 'B');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE4C', '4', 'C');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql>
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE5A', '5', 'A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE5B', '5', 'B');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE5C', '5', 'C');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE6A', '6', 'A');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE6B', '6', 'B');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE6C', '6', 'C');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE7A', '7', 'A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE7B', '7', 'B');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE7C', '7', 'C');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE8A', '8', 'A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE8B', '8', 'B');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SEMSEC VALUES  
-> ('CSE8C', '8', 'C');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql>
```



```
mysql> SELECT * FROM SEMSEC;
```

SSID	SEM	SEC
CSE1A	1	A
CSE1B	1	B
CSE1C	1	C
CSE2A	2	A
CSE2B	2	B
CSE2C	2	C
CSE3A	3	A
CSE3B	3	B
CSE3C	3	C
CSE4A	4	A
CSE4B	4	B
CSE4C	4	C
CSE5A	5	A
CSE5B	5	B
CSE5C	5	C
CSE6A	6	A
CSE6B	6	B
CSE6C	6	C
CSE7A	7	A
CSE7B	7	B
CSE7C	7	C
CSE8A	8	A
CSE8B	8	B
CSE8C	8	C

```
24 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD13CS020', 'CSE8A');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD13CS062', 'CSE8A');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD13CS066', 'CSE8B');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD13CS091', 'CSE8C');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD14CS010', 'CSE7A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD14CS025', 'CSE7A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD14CS032', 'CSE7A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD15CS011', 'CSE4A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD15CS029', 'CSE4A');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD15CS045', 'CSE4B');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES  
-> ('4AD15CS091', 'CSE4C');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql>
```

```
mysql> INSERT INTO CLASS VALUES
      -> ('4AD16CS045', 'CSE3A');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES
      -> ('4AD16CS088', 'CSE3B');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO CLASS VALUES
      -> ('4AD16CS122', 'CSE3C');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT * FROM CLASS;
```

USN	SSID
4AD16CS045	CSE3A
4AD16CS088	CSE3B
4AD16CS122	CSE3C
4AD15CS011	CSE4A
4AD15CS029	CSE4A
4AD15CS045	CSE4B
4AD15CS091	CSE4C
4AD14CS010	CSE7A
4AD14CS025	CSE7A
4AD14CS032	CSE7A
4AD13CS020	CSE8A
4AD13CS062	CSE8A
4AD13CS066	CSE8B
4AD13CS091	CSE8C

```
14 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS81', 'ACA', '8', '4');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS82','SSM', '8', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS83','NM', '8', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS84','CC', '8', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS85','PW', '8', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS71','OOAD', '7', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS72','ECS', '7', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS73','PTW', '7', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS74','DWD', '7', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS75','JAVA', '7', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('10CS76','SAN', '7', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql>
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS51', 'ME', '5', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS52', 'CN', '5', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS53', 'DBMS', '5', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS54', 'ATC', '5', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS55', 'JAVA', '5', '3');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS56', 'AI', '5', '3');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS41', 'M4', '4', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS42', 'SE', '4', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS43', 'DAA', '4', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS44', 'MPMC', '4', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS45', 'OOC', '4', '3');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS46', 'DC', '4', '3');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql>
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS31','M3', '3', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS32','ADE', '3', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS33','DSA', '3', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS34','CO', '3', '4');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS35','USP', '3', '3');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO SUBJECT VALUES  
-> ('15CS36','DMS', '3', '3');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT * FROM SUBJECT;
```

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

```
29 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> INSERT INTO IAMARKS VALUES
-> ('4AD13CS091','10CS81','CSE8C', '15', '16', '18', '0');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO IAMARKS VALUES
-> ('4AD13CS091','10CS82','CSE8C', '12', '19', '14', '0');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO IAMARKS VALUES
-> ('4AD13CS091','10CS83','CSE8C', '19', '15', '20', '0');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO IAMARKS VALUES
-> ('4AD13CS091','10CS84','CSE8C', '20', '16', '19', '0');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO IAMARKS VALUES
-> ('4AD13CS091','10CS85','CSE8C', '15', '15', '12', '0');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT * FROM IAMARKS;
```

USN	SUBCODE	SSID	TEST1	TEST2	TEST3	FINALIA
4AD13CS091	10CS81	CSE8C	15	16	18	0
4AD13CS091	10CS82	CSE8C	12	19	14	0
4AD13CS091	10CS83	CSE8C	19	15	20	0
4AD13CS091	10CS84	CSE8C	20	16	19	0
4AD13CS091	10CS85	CSE8C	15	15	12	0

```
5 rows in set (0.00 sec)
```

```
mysql>
```



```
mysql> DESCRIBE STUDENT;
```

Field	Type	Null	Key	Default	Extra
USN	char(10)	NO	PRI	NULL	
SNAME	varchar(20)	YES		NULL	
ADDRESS	varchar(30)	YES		NULL	
PHONE	char(10)	YES		NULL	
GENDER	char(1)	YES		NULL	

```
5 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM STUDENT;
```

USN	SNAME	ADDRESS	PHONE	GENDER
4AD13CS020	AKSHAY	BELAGAVI	8877881122	M
4AD13CS062	SANDHYA	BENGALURU	7722829912	F
4AD13CS066	SUPRIYA	MANGALURU	8877881122	F
4AD13CS091	TEESHA	BENGALURU	7712312312	F
4AD14CS010	ABHAY	BENGALURU	9900211201	M
4AD14CS025	ASMI	BENGALURU	7894737377	F
4AD14CS032	BHASKAR	BENGALURU	9923211099	M
4AD15CS011	AJAY	TUMKUR	9845091341	M
4AD15CS029	CHITRA	DAVANGERE	7696772121	F
4AD15CS045	JEEVA	BELLARY	9944850121	M
4AD15CS091	SANTOSH	MANGALURU	8812332201	M
4AD16CS045	ISMAIL	KABURGI	9900232201	M
4AD16CS088	SAMEERA	SHIMOGA	9905542212	F
4AD16CS122	VINAYAKA	CHIKAMAGALUR	8800880011	M

```
14 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> DESCRIBE SEMSEC;
```

Field	Type	Null	Key	Default	Extra
SSID	char(5)	NO	PRI	NULL	
SEM	char(1)	YES		NULL	
SEC	char(1)	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> SELECT * FROM SEMSEC;
```

SSID	SEM	SEC
CSE1A	1	A
CSE1B	1	B
CSE1C	1	C
CSE2A	2	A
CSE2B	2	B
CSE2C	2	C
CSE3A	3	A
CSE3B	3	B
CSE3C	3	C
CSE4A	4	A
CSE4B	4	B
CSE4C	4	C
CSE5A	5	A
CSE5B	5	B
CSE5C	5	C
CSE6A	6	A
CSE6B	6	B
CSE6C	6	C
CSE7A	7	A
CSE7B	7	B
CSE7C	7	C
CSE8A	8	A
CSE8B	8	B
CSE8C	8	C

24 rows in set (0.00 sec)

```
mysql>
```

```
mysql> DESCRIBE CLASS;
```

Field	Type	Null	Key	Default	Extra
USN	char(10)	NO	PRI	NULL	
SSID	char(5)	NO	PRI	NULL	

```
2 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM CLASS;
```

USN	SSID
4AD16CS045	CSE3A
4AD16CS088	CSE3B
4AD16CS122	CSE3C
4AD15CS011	CSE4A
4AD15CS029	CSE4A
4AD15CS045	CSE4B
4AD15CS091	CSE4C
4AD14CS010	CSE7A
4AD14CS025	CSE7A
4AD14CS032	CSE7A
4AD13CS020	CSE8A
4AD13CS062	CSE8A
4AD13CS066	CSE8B
4AD13CS091	CSE8C

```
14 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> DESCRIBE SUBJECT;
```

Field	Type	Null	Key	Default	Extra
SUBCODE	char(7)	NO	PRI	NULL	
TITLE	varchar(20)	YES		NULL	
SEM	char(1)	YES		NULL	
CREDITS	char(1)	YES		NULL	

```
4 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM SUBJECT;
```

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

```
29 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> DESCRIBE IAMARKS;
```

Field	Type	Null	Key	Default	Extra
USN	char(10)	NO	PRI	NULL	
SUBCODE	char(7)	NO	PRI	NULL	
SSID	char(5)	NO	PRI	NULL	
TEST1	int	YES		NULL	
TEST2	int	YES		NULL	
TEST3	int	YES		NULL	
FINALIA	int	YES		NULL	

```
7 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM IAMARKS;
```

USN	SUBCODE	SSID	TEST1	TEST2	TEST3	FINALIA
4AD13CS091	10CS81	CSE8C	15	16	18	0
4AD13CS091	10CS82	CSE8C	12	19	14	0
4AD13CS091	10CS83	CSE8C	19	15	20	0
4AD13CS091	10CS84	CSE8C	20	16	19	0
4AD13CS091	10CS85	CSE8C	15	15	12	0

```
5 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> SELECT * FROM CLASS;
```

USN	SSID
4AD16CS045	CSE3A
4AD16CS088	CSE3B
4AD16CS122	CSE3C
4AD15CS011	CSE4A
4AD15CS029	CSE4A
4AD15CS045	CSE4B
4AD15CS091	CSE4C
4AD14CS010	CSE7A
4AD14CS025	CSE7A
4AD14CS032	CSE7A
4AD13CS020	CSE8A
4AD13CS062	CSE8A
4AD13CS066	CSE8B
4AD13CS091	CSE8C

14 rows in set (0.00 sec)

```
mysql> SELECT S.*, SS.SEM, SS.SEC
```

```
-> FROM STUDENT AS S, SEMSEC AS SS, CLASS AS C
```

```
-> WHERE S.USN = C.USN AND SS.SSID = C.SSID AND SS.SEM = '4' AND SS.SEC = 'C';
```

USN	SNAME	ADDRESS	PHONE	GENDER	SEM	SEC
4AD15CS091	SANTOSH	MANGALURU	8812332201	M	4	C

1 row in set (0.00 sec)

```
mysql>
```

```
mysql> SELECT * FROM CLASS;
```

USN	SSID
4AD16CS045	CSE3A
4AD16CS088	CSE3B
4AD16CS122	CSE3C
4AD15CS011	CSE4A
4AD15CS029	CSE4A
4AD15CS045	CSE4B
4AD15CS091	CSE4C
4AD14CS010	CSE7A
4AD14CS025	CSE7A
4AD14CS032	CSE7A
4AD13CS020	CSE8A
4AD13CS062	CSE8A
4AD13CS066	CSE8B
4AD13CS091	CSE8C

14 rows in set (0.00 sec)

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

SEM	SEC	GENDER	COUNT
3	A	M	1
3	B	F	1
3	C	M	1
4	A	F	1
4	A	M	1
4	B	M	1
4	C	M	1
7	A	F	1
7	A	M	2
8	A	F	1
8	A	M	1
8	B	F	1
8	C	F	1

13 rows in set (0.00 sec)

```
mysql>
```

```
mysql> SELECT * FROM IAMARKS;
```

USN	SUBCODE	SSID	TEST1	TEST2	TEST3	FINALIA
4AD13CS091	10CS81	CSE8C	15	16	18	0
4AD13CS091	10CS82	CSE8C	12	19	14	0
4AD13CS091	10CS83	CSE8C	19	15	20	0
4AD13CS091	10CS84	CSE8C	20	16	19	0
4AD13CS091	10CS85	CSE8C	15	15	12	0

5 rows in set (0.00 sec)

```
mysql> CREATE VIEW VW_STUDENT_MARKS AS
-> SELECT TEST1, SUBCODE
-> FROM IAMARKS
-> WHERE USN = '4AD13CS091';
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> SELECT * FROM VW_STUDENT_MARKS;
```

TEST1	SUBCODE
15	10CS81
12	10CS82
19	10CS83
20	10CS84
15	10CS85

5 rows in set (0.00 sec)

mysql> # INSTEAD OF USN '1BI15CS101', I HAVE CONSIDERED USN '4AD13CS091'. THE MAIN AIM OF CREATING A VIEW TO DISPLAY FIRST TEST IA MARKS OF ANY 'X' STUDENT HAS BEEN ACHIEVED.

mysql> # USERS CAN CREATE AN ENTRY FOR USN '1BI15CS101' THE NEXT TIME THEY ENTER VALUES UNDER THE USN COLUMN AND CAN PERFORM THE SAME QUERY AGAIN.

mysql>


```
mysql> SELECT * FROM IAMARKS;
```

USN	SUBCODE	SSID	TEST1	TEST2	TEST3	FINALIA
4AD13CS091	10CS81	CSE8C	15	16	18	0
4AD13CS091	10CS82	CSE8C	12	19	14	0
4AD13CS091	10CS83	CSE8C	19	15	20	0
4AD13CS091	10CS84	CSE8C	20	16	19	0
4AD13CS091	10CS85	CSE8C	15	15	12	0

5 rows in set (0.00 sec)

```
mysql> UPDATE IAMARKS
```

```
-> SET FINALIA = GREATEST (TEST1 + TEST2, TEST2 + TEST3, TEST3 + TEST1)/2;
```

Query OK, 5 rows affected (0.01 sec)

Rows matched: 5 Changed: 5 Warnings: 0

```
mysql> SELECT * FROM IAMARKS;
```

USN	SUBCODE	SSID	TEST1	TEST2	TEST3	FINALIA
4AD13CS091	10CS81	CSE8C	15	16	18	17
4AD13CS091	10CS82	CSE8C	12	19	14	17
4AD13CS091	10CS83	CSE8C	19	15	20	20
4AD13CS091	10CS84	CSE8C	20	16	19	20
4AD13CS091	10CS85	CSE8C	15	15	12	15

5 rows in set (0.00 sec)

```
mysql>
```

```
mysql> SELECT * FROM IAMARKS;
```

USN	SUBCODE	SSID	TEST1	TEST2	TEST3	FINALIA
4AD13CS091	10CS81	CSE8C	15	16	18	17
4AD13CS091	10CS82	CSE8C	12	19	14	17
4AD13CS091	10CS83	CSE8C	19	15	20	20
4AD13CS091	10CS84	CSE8C	20	16	19	20
4AD13CS091	10CS85	CSE8C	15	15	12	15

```
5 rows in set (0.00 sec)
```

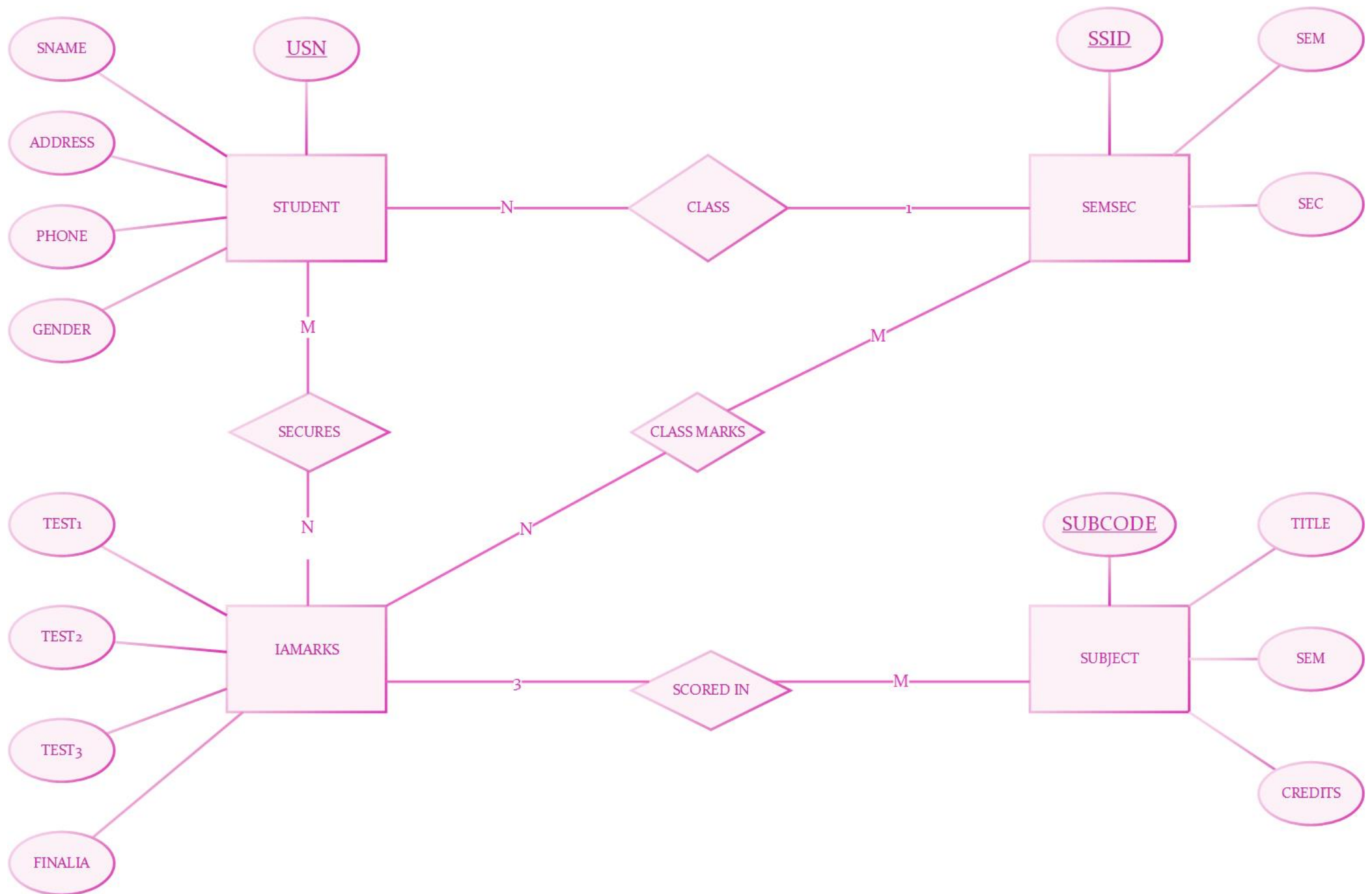
```
mysql> SELECT S.USN, S.SNAME, S.ADDRESS, S.PHONE, S.GENDER,
```

```
-> (  
-> 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 AS S, SEMSEC AS SS, IAMARKS AS IA, SUBJECT AS SUB  
-> WHERE S.USN = IA.USN AND SS.SSID = IA.SSID AND SUB.SUBCODE = IA.SUBCODE AND SUB.SEM = '8';
```

USN	SNAME	ADDRESS	PHONE	GENDER	CAT
4AD13CS091	TEESHA	BENGALURU	7712312312	F	OUTSTANDING
4AD13CS091	TEESHA	BENGALURU	7712312312	F	OUTSTANDING
4AD13CS091	TEESHA	BENGALURU	7712312312	F	OUTSTANDING
4AD13CS091	TEESHA	BENGALURU	7712312312	F	OUTSTANDING
4AD13CS091	TEESHA	BENGALURU	7712312312	F	AVERAGE

```
5 rows in set (0.00 sec)
```

```
mysql>
```



STUDENT

USN	SNAME	ADDRESS	PHONE	GENDER
-----	-------	---------	-------	--------

SEMSEC

SSID	SEM	SEC
------	-----	-----

CLASS

USN	SSID
-----	------

SUBJECT

SUBCODE	TITLE	SEM	CREDITS
---------	-------	-----	---------

IAMARKS

USN	SUBCODE	SSID	TEST1	TEST2	TEST3	FINALIA
-----	---------	------	-------	-------	-------	---------

