

```
mysql> CREATE TABLE DEPARTMENT(DEPTNO varchar(10) PRIMARY KEY,  
DEPTNAME varchar(20), STAFFNO varchar(10));
```

```
mysql> DESC DEPARTMENT;
```

Field	Type	Null	Key	Default	Extra
DEPTNO	varchar(10)	NO	PRI	NULL	
DEPTNAME	varchar(20)	YES		NULL	
STAFFNO	varchar(10)	YES		NULL	

```
INSERT INTO DEPARTMENT VALUES ('D1', 'S101', 'CS'),('D2', 'S110',  
'ECE');
```

```
mysql> SELECT* FROM DEPARTMENT;
```

DEPTNO	DEPTNAME	STAFFNO
D1	S101	CS
D2	S110	ECE

```
mysql> CREATE TABLE BOOKS(TITLE varchar(25) PRIMARY KEY, AUTHOR  
varchar(20));
```

```
mysql> DESC BOOKS;
```

Field	Type	Null	Key	Default	Extra
TITLE	varchar(25)	NO	PRI	NULL	
AUTHOR	varchar(20)	YES		NULL	

```
mysql> INSERT INTO BOOKS VALUES ('DBMS', 'Navathe'), ('C', 'Dennis  
Richie');
```

```
mysql> SELECT * FROM BOOKS;
```

TITLE	AUTHOR
C	Dennis Richie
DBMS	Navathe

```
mysql> INSERT INTO BOOKS VALUES ('DBMS', 'Kim');  
ERROR 1062 (23000): Duplicate entry 'DBMS' for key 'books.PRIMARY'  
mysql> CREATE TABLE LIBRARY(TITLE varchar(25), AUTHOR varchar(20),  
NOOFCOPIES int(3), FOREIGN KEY (TITLE) REFERENCES BOOKS(TITLE));
```

```
mysql> DESC LIBRARY;
```

Field	Type	Null	Key	Default	Extra
TITLE	varchar(25)	YES	MUL	NULL	
AUTHOR	varchar(20)	YES		NULL	
NOOFCOPIES	int	YES		NULL	

```
mysql> INSERT INTO LIBRARY VALUES ('C', 'Dennis Richie', 5),
('DBMS', 'Navathe', 10);
```

```
mysql> SELECT* FROM LIBRARY;
```

TITLE	AUTHOR	NOOFCOPIES
C	Dennis Richie	5
DBMS	Navathe	10

```
mysql> ALTER TABLE LIBRARY ADD PRIMARY KEY (TITLE);
```

```
mysql> ALTER TABLE LIBRARY ADD PRIMARY KEY (AUTHOR);
ERROR 1068 (42000): Multiple primary key defined
```

```
mysql> DESC LIBRARY;
```

Field	Type	Null	Key	Default	Extra
TITLE	varchar(25)	NO	PRI	NULL	
AUTHOR	varchar(20)	YES		NULL	
NOOFCOPIES	int	YES		NULL	

```
mysql> CREATE TABLE ACCOUNT(ACCOUNTNO int(30) PRIMARY KEY, AMOUNT
int(50), CHECK(AMOUNT>=250));
```

```
mysql> DESC ACCOUNT;
```

Field	Type	Null	Key	Default	Extra
ACCOUNTNO	int	NO	PRI	NULL	
AMOUNT	int	YES		NULL	

```
mysql> INSERT INTO ACCOUNT VALUES(147,1000), (210,5000), (777,100),
(623,5001);
ERROR 3819 (HY000): Check constraint 'account_chk_1' is violated.
```

```
mysql> INSERT INTO ACCOUNT VALUES(147,1000), (210,5000),
(623,5001);
```

```
mysql> SELECT * FROM ACCOUNT;
```

ACCOUNTNO	AMOUNT
147	1000
210	5000
623	5001

```
mysql> INSERT INTO ACCOUNT VALUES(320, 100);
ERROR 3819 (HY000): Check constraint 'account_chk_1' is violated.
```

```
mysql> CREATE TABLE EMPLOYEE(EMPID int(30), NAME varchar(20),
GENDER varchar(10));
```

```
mysql> DESC EMPLOYEE;
```

Field	Type	Null	Key	Default	Extra
EMPID	int	YES		NULL	
NAME	varchar(20)	YES		NULL	
GENDER	varchar(1)	YES		NULL	

```
mysql> INSERT INTO EMPLOYEE VALUES (101, 'ADVAITH', 'M' ), (201, 'AKSHAY', 'M'), (301, 'ANNA', 'F'), (305, 'PAI', 'M'), (310, 'CRIS', 'M');
```

```
mysql> SELECT * FROM EMPLOYEE;
```

EMPID	NAME	GENDER
101	ADVAITH	M
201	AKSHAY	M
301	ANNA	F
305	PAI	M
310	CRIS	M

```
mysql> CREATE TABLE PAYMENT (PID int PRIMARY KEY, ID int, AMOUNT int, FOREIGN KEY (ID) REFERENCES EMPLOYEE(EMPID) ON DELETE CASCADE ON UPDATE);
```

```
mysql> DESC PAYMENT;
```

Field	Type	Null	Key	Default	Extra
PID	int	NO	PRI	NULL	
ID	int	YES	MUL	NULL	
AMOUNT	int	YES		NULL	

```
mysql> INSERT INTO PAYMENT VALUES (1, 201, 5000), (2, 301, 7000), (3,101,50000), (4,310,25000), (5, 201, 6000);
```

```
mysql> SELECT * FROM PAYMENT;
```

PID	ID	AMOUNT
1	201	5000
2	301	7000
3	101	50000
4	310	25000
5	201	6000

```
mysql> DELETE FROM EMPLOYEE WHERE EMPID = 201;
```

```
mysql> SELECT * FROM EMPLOYEE;
```

EMPID	NAME	GENDER
101	ADVAITH	M
301	ANNA	F
305	PAI	M
310	CRIS	M

```
mysql> SELECT * FROM PAYMENT;
```

PID	ID	AMOUNT
2	301	7000
3	101	50000
4	310	25000

```
mysql> UPDATE EMPLOYEE SET EMPID = 320 WHERE EMPID = 301;
```

```
mysql> SELECT * FROM EMPLOYEE;
```

EMPID	NAME	GENDER
101	ADVAITH	M
305	PAI	M
310	CRIS	M
320	ANNA	F

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

```
mysql> SELECT * FROM PAYMENT;
```

PID	ID	AMOUNT
2	320	7000
3	101	50000
4	310	25000