

/////////////////////////////////ASSIGNMENT NO:-1 (Group A)/////////////////////////////////

gurukul@ubuntu:~\$ mysql -u root -p

Enter password:

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 36

Server version: 5.5.37-0ubuntu0.12.10.1 (Ubuntu)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;

Database
information_schema
mysql
performance_schema

3 rows in set (0.01 sec)

mysql> create database college;

Query OK, 1 row affected (0.00 sec)

mysql> show databases;

Database
information_schema
college
mysql
performance_schema

4 rows in set (0.00 sec)

mysql> use college;

Database changed

mysql> drop database college;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'databse college' at line 1

mysql> drop database college;

Query OK, 0 rows affected (0.00 sec)

```
mysql> show databases
```

```
-> show databases;
```

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'show databases' at line 2

```
mysql> show databases;
```

```
+-----+
```

```
| Database |
```

```
+-----+
```

```
| information_schema |
```

```
| mysql |
```

```
| performance_schema |
```

```
+-----+
```

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

```
mysql>
```

//////////ASSIGNMENT NO:-2 (Group A)//////////

//Create database:-

```
mysql> create database college;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> use college;
```

Database changed

```
mysql> create table stud(Rno int(4),Name varchar(20));
Query OK, 0 rows affected (0.01 sec)
```

//Describe table:-

```
mysql> desc stud;
```

Field	Type	Null	Key	Default	Extra
Rno	int(4)	YES		NULL	
Name	varchar(20)	YES		NULL	

2 rows in set (0.00 sec)

//add column:-

```
mysql> alter table stud add address varchar(30);
Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> desc stud;
```

Field	Type	Null	Key	Default	Extra
Rno	int(4)	YES		NULL	
Name	varchar(20)	YES		NULL	
address	varchar(30)	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> show tables;
```

Tables_in_college
stud

1 row in set (0.00 sec)

//modify column:-

```
mysql> alter table stud modify address varchar(40);
```

Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc stud;

Field	Type	Null	Key	Default	Extra
Rno	int(4)	YES		NULL	
Name	varchar(20)	YES		NULL	
address	varchar(40)	YES		NULL	

3 rows in set (0.01 sec)

mysql> alter table stud modify Name char(20);

Query OK, 0 rows affected (0.00 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc stud;

Field	Type	Null	Key	Default	Extra
Rno	int(4)	YES		NULL	
Name	char(20)	YES		NULL	
address	varchar(40)	YES		NULL	

3 rows in set (0.01 sec)

//drop column:-

mysql> alter table stud drop column address;

Query OK, 0 rows affected (0.00 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc stud;

Field	Type	Null	Key	Default	Extra
Rno	int(4)	YES		NULL	
Name	char(20)	YES		NULL	

2 rows in set (0.00 sec)

mysql> alter table stud add DOB date;

Query OK, 0 rows affected (0.00 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc stud;

Field	Type	Null	Key	Default	Extra
-------	------	------	-----	---------	-------

Field	Type	Null	Key	Default	Extra
Rno	int(4)	YES		NULL	
Name	char(20)	YES		NULL	
DOB	date	YES		NULL	

3 rows in set (0.00 sec)

//truncate table:-

mysql> truncate table stud;

Query OK, 0 rows affected (0.00 sec)

//rename table:-

mysql> rename table stud to student;

Query OK, 0 rows affected (0.00 sec)

mysql> show tables;

Tables_in_college
student

1 row in set (0.00 sec)

DATE:- 21/06/17

gurukul@ubuntu:~\$ mysql -u root -p

Enter password:

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 36

Server version: 5.5.37-0ubuntu0.12.10.1 (Ubuntu)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;

Database
information_schema
college
mysql

```
| performance_schema |
+-----+
4 rows in set (0.02 sec)
```

```
mysql> use college;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
```

```
Database changed
mysql> show tables;
+-----+
| Tables_in_college |
+-----+
| student           |
+-----+
1 row in set (0.00 sec)
```

// Unique:-

```
mysql> create table stud1(rno int (3)unique,age int(4));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> desc stud1;
+-----+-----+-----+-----+-----+-----+
| Field | Type  | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| rno   | int(3) | YES  | UNI | NULL    |      |
| age   | int(4) | YES  |     | NULL    |      |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

// Not null:-

```
mysql> create table stud2(rno int(3)unique,name varchar(20)not null);
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> desc stud2;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| rno   | int(3)    | YES  | UNI | NULL    |      |
| name  | varchar(20) | NO   |     | NULL    |      |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

// Primary key:-

```
mysql> create table stud3(rno int(3) primary key,name varchar(20));
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> desc stud3;
```

Field	Type	Null	Key	Default	Extra
rno	int(3)	NO	PRI	NULL	
name	varchar(20)	YES		NULL	

2 rows in set (0.00 sec)

//default:-

```
mysql> create table stud4(rno int(3) primary key,addr varchar(20) default 'chandwad');
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> desc stud4;
```

Field	Type	Null	Key	Default	Extra
rno	int(3)	NO	PRI	NULL	
addr	varchar(20)	YES		chandwad	

2 rows in set (0.00 sec)

// Check:-

```
mysql> create table stud5(rno int(3),age int(4) check(age>18));
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> desc stud5;
```

Field	Type	Null	Key	Default	Extra
rno	int(3)	YES		NULL	
age	int(4)	YES		NULL	

2 rows in set (0.00 sec)

// Foreign key:-

```
mysql> create table emp(eno int(3) primary key,ename varchar(20));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> create table emp_prj(enumber int(3) references emp(eno),prname varchar(20));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> desc emp;
```

Field	Type	Null	Key	Default	Extra
eno	int(3)	NO	PRI	NULL	

```
| ename | varchar(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> desc emp_prj;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| enumber | int(3)    | YES  |     | NULL    |       |
| pname  | varchar(20) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
// How to add constraint after creation of table:-
mysql> create table cust(cid int(4),cname varchar(10));
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> desc cust;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| cid   | int(4)    | YES  |     | NULL    |       |
| cname | varchar(10) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> alter table cust add constraint pk1 primary key(cid);
Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
//drop constraint:-
mysql> alter table cust drop primary key;
Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> desc cust;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| cid   | int(4)    | NO   | 0    |         |       |
| cname | varchar(10) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
// add constraint at a time of table creation:-
mysql> create table cust1(cid int(4),cname varchar(20),addr varchar(30),primary
key(cid,cname));
Query OK, 0 rows affected (0.00 sec)
```



```
mysql> desc cust1;
```

```
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| cid   | int(4)     | NO   | PRI | 0        |       |
| cname | varchar(20)| NO   | PRI |          |       |
| addr  | varchar(30)| YES  |     | NULL     |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
// Index:-
```

```
// create index:-
```

```
mysql> create index ind1 on cust(cname);
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 0
```

```
// Show index:-
```

```
mysql> show index from cust;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality |
Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| cust  | 1         | ind1     | 1            | cname       | A          | 0           | NULL | NULL | YES |
BTREE   |         |         |              |             |           |             |      |      |     |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
1 row in set (0.01 sec)
```

```
// drop index:-
```

```
mysql> alter table cust drop index ind1;
```

```
Query OK, 0 rows affected (0.00 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> show index from cust;
```

```
Empty set (0.01 sec)
```

```
// View:
```

```
//Create view:-
```

```
mysql> create view v1 as select rno from stud1;
```

```
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> desc v1;
```

```
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
```

```

+-----+-----+-----+-----+-----+-----+
| rno   | int(3) | YES  |      | NULL  |      |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

```

//display view:-
mysql> select * from v1;
Empty set (0.00 sec)

```

```

//drop view:-
mysql> drop view v1;
Query OK, 0 rows affected (0.00 sec)

```

```

//Sequence:-
mysql> create table bills(bill_no int(4)primary key auto_increment,amt int(5));
Query OK, 0 rows affected (0.00 sec)

```

```

mysql> alter table bills auto_increment=101;
Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0

```

```

mysql> desc bills;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| bill_no | int(4) | NO | PRI | NULL | auto_increment |
| amt | int(5) | YES |      | NULL |      |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

```

/////////////////////////////////ASSIGNMENT NO:-3/////////////////////////////////
DATE:-27/06/17

```
gurukul@ubuntu:~$ mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 36
Server version: 5.5.37-0ubuntu0.12.10.1 (Ubuntu)
```

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| college |
| mysql |
| performance_schema |
+-----+
4 rows in set (0.02 sec)
```

```
mysql> use college;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
```

```
Database changed
mysql> create table stud(rno int(3),name varchar(20));
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> desc stud;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| rno | int(3) | YES | | NULL | |
| name | varchar(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//DML COMMANDS:

//INSERT:-

```
mysql> insert into stud values(1,'Jayu');
```

Query OK, 1 row affected (0.00 sec)

mysql> insert into stud(rno) values(2);

Query OK, 1 row affected (0.00 sec)

mysql> insert into stud(name) values('Komu');

Query OK, 1 row affected (0.00 sec)

//SELECT:-

mysql> select * from stud;

-----+-----+	
rno name	
-----+-----+	
1 Jayu	
2 NULL	
NULL Komu	
-----+-----+	

3 rows in set (0.00 sec)

//INSERT multiple records:-

mysql> insert into stud values(4,'Snehal'),(5,'Prachi'),(6,'Reena');

Query OK, 3 rows affected (0.00 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select * from stud;

-----+-----+	
rno name	
-----+-----+	
1 Jayu	
2 NULL	
NULL Komu	
4 Snehal	
5 Prachi	
6 Reena	
-----+-----+	

6 rows in set (0.00 sec)

//DELETE:-

mysql> delete from stud where rno=1;

Query OK, 1 row affected (0.00 sec)

mysql> select * from stud;

-----+-----+	
rno name	
-----+-----+	
2 NULL	
NULL Komu	
4 Snehal	

```
| 5 | Prachi |  
| 6 | Reena |  
+-----+-----+  
5 rows in set (0.00 sec)
```

```
mysql> delete from stud where name='komu';  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from stud;  
+-----+-----+  
| rno | name |  
+-----+-----+  
| 2 | NULL |  
| 4 | Snehal |  
| 5 | Prachi |  
| 6 | Reena |  
+-----+-----+  
4 rows in set (0.00 sec)
```

```
//UPDATE:-  
mysql> update stud set name='Jayu' where rno=2;  
Query OK, 1 row affected (0.00 sec)  
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> select * from stud;  
+-----+-----+  
| rno | name |  
+-----+-----+  
| 2 | Jayu |  
| 4 | Snehal |  
| 5 | Prachi |  
| 6 | Reena |  
+-----+-----+  
4 rows in set (0.00 sec)
```

```
mysql> update stud set rno=3 where name='Snehal';  
Query OK, 1 row affected (0.00 sec)  
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> select * from stud;  
+-----+-----+  
| rno | name |  
+-----+-----+  
| 2 | Jayu |  
| 3 | Snehal |  
| 5 | Prachi |  
| 6 | Reena |  
+-----+-----+
```

4 rows in set (0.00 sec)

```
mysql> update stud set rno=4 where rno=5;
```

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> select * from stud;
```

```
+-----+-----+
```

```
| rno | name |
```

```
+-----+-----+
```

```
| 2 | Jayu |
```

```
| 3 | Snehal |
```

```
| 4 | Prachi |
```

```
| 6 | Reena |
```

```
+-----+-----+
```

4 rows in set (0.00 sec)

//UPDATE more than 1 condition:-

```
mysql> update stud set rno=5,name='Komu' where rno=6;
```

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> select * from stud;
```

```
+-----+-----+
```

```
| rno | name |
```

```
+-----+-----+
```

```
| 2 | Jayu |
```

```
| 3 | Snehal |
```

```
| 4 | Prachi |
```

```
| 5 | Komu |
```

```
+-----+-----+
```

4 rows in set (0.00 sec)

//SELECT:-

```
mysql> select * from stud where rno=3;
```

```
+-----+-----+
```

```
| rno | name |
```

```
+-----+-----+
```

```
| 3 | Snehal |
```

```
+-----+-----+
```

1 row in set (0.00 sec)

```
mysql> select name from stud where rno=3;
```

```
+-----+
```

```
| name |
```

```
+-----+
```

```
| Snehal |
```

```
+-----+
```

1 row in set (0.00 sec)

```
mysql> select name from stud where rno>3;
```

```
+-----+
| name  |
+-----+
| Prachi|
| Komu  |
+-----+
```

2 rows in set (0.00 sec)

```
mysql> select name from stud where rno!=3;
```

```
+-----+
| name  |
+-----+
| Jayu  |
| Prachi|
| Komu  |
+-----+
```

3 rows in set (0.00 sec)

```
mysql> select * from stud where rno!=3;
```

```
+-----+-----+
| rno | name |
+-----+-----+
| 2   | Jayu |
| 4   | Prachi|
| 5   | Komu |
+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> alter table stud add city varchar(30);
```

Query OK, 4 rows affected (0.00 sec)

Records: 4 Duplicates: 0 Warnings: 0

```
mysql> desc stud;
```

```
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| rno   | int(3)    | YES  |     | NULL    |       |
| name  | varchar(20)| YES  |     | NULL    |       |
| city  | varchar(30)| YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> select * from stud;
```

```
+-----+-----+-----+
| rno | name | city |
+-----+-----+-----+
```

```

+-----+-----+-----+
| 2 | Jayu | NULL |
| 3 | Snehal | NULL |
| 4 | Prachi | NULL |
| 5 | Komu | NULL |
+-----+-----+-----+

```

4 rows in set (0.00 sec)

```

mysql> update stud set city='Nashik' where rno=2 or rno=4;
Query OK, 2 rows affected (0.00 sec)
Rows matched: 2  Changed: 2  Warnings: 0

```

```

mysql> select * from stud;

```

```

+-----+-----+-----+
| rno | name | city |
+-----+-----+-----+
| 2 | Jayu | Nashik |
| 3 | Snehal | NULL |
| 4 | Prachi | Nashik |
| 5 | Komu | NULL |
+-----+-----+-----+

```

4 rows in set (0.00 sec)

```

mysql> update stud set city='Pune' where rno in(3,5);
Query OK, 2 rows affected (0.00 sec)
Rows matched: 2  Changed: 2  Warnings: 0

```

```

mysql> select * from stud;

```

```

+-----+-----+-----+
| rno | name | city |
+-----+-----+-----+
| 2 | Jayu | Nashik |
| 3 | Snehal | Pune |
| 4 | Prachi | Nashik |
| 5 | Komu | Pune |
+-----+-----+-----+

```

4 rows in set (0.00 sec)

//ORDER BY:-

```

mysql> select * from stud order by rno;

```

```

+-----+-----+-----+
| rno | name | city |
+-----+-----+-----+
| 2 | Jayu | Nashik |
| 3 | Snehal | Pune |
| 4 | Prachi | Nashik |
| 5 | Komu | Pune |

```



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

```
mysql> select * from stud order by rno desc;
```

```
+-----+-----+-----+
| rno | name  | city |
+-----+-----+-----+
| 5 | Komu  | Pune |
| 4 | Prachi | Nashik |
| 3 | Snehal | Pune |
| 2 | Jayu  | Nashik |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select * from stud order by name;
```

```
+-----+-----+-----+
| rno | name  | city |
+-----+-----+-----+
| 2 | Jayu  | Nashik |
| 5 | Komu  | Pune |
| 4 | Prachi | Nashik |
| 3 | Snehal | Pune |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select * from stud order by name desc;
```

```
+-----+-----+-----+
| rno | name  | city |
+-----+-----+-----+
| 3 | Snehal | Pune |
| 4 | Prachi | Nashik |
| 5 | Komu  | Pune |
| 2 | Jayu  | Nashik |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select * from stud order by city,rno;
```

```
+-----+-----+-----+
| rno | name  | city |
+-----+-----+-----+
| 2 | Jayu  | Nashik |
| 4 | Prachi | Nashik |
| 3 | Snehal | Pune |
| 5 | Komu  | Pune |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select * from stud order by city,name;
```

```

+-----+-----+-----+
| rno | name | city |
+-----+-----+-----+
| 2 | Jayu | Nashik |
| 4 | Prachi | Nashik |
| 5 | Komu | Pune |
| 3 | Snehal | Pune |
+-----+-----+-----+
4 rows in set (0.00 sec)

```

//LIKE:-

```
mysql> select * from stud where name like 'J%';
```

```

+-----+-----+-----+
| rno | name | city |
+-----+-----+-----+
| 2 | Jayu | Nashik |
+-----+-----+-----+
1 row in set (0.00 sec)

```

```
mysql> select * from stud where name like 'K_____';
```

```

+-----+-----+-----+
| rno | name | city |
+-----+-----+-----+
| 5 | Komu | Pune |
+-----+-----+-----+
1 row in set (0.00 sec)

```

```
mysql> select * from stud where name like '%a%';
```

```

+-----+-----+-----+
| rno | name | city |
+-----+-----+-----+
| 2 | Jayu | Nashik |
| 3 | Snehal | Pune |
| 4 | Prachi | Nashik |
+-----+-----+-----+
3 rows in set (0.00 sec)

```

```
mysql> select * from stud where name like '%i';
```

```

+-----+-----+-----+
| rno | name | city |
+-----+-----+-----+
| 4 | Prachi | Nashik |
+-----+-----+-----+
1 row in set (0.00 sec)

```

//DISTINCT:-

```
mysql> select distinct(city) from stud;
```

```
+-----+
| city |
+-----+
| Nashik |
| Pune |
+-----+
2 rows in set (0.00 sec)
```

```
//
mysql> alter table stud add marks int(3);
Query OK, 4 rows affected (0.01 sec)
Records: 4 Duplicates: 0 Warnings: 0
```

```
mysql> desc stud;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| rno   | int(3)    | YES  |     | NULL    |       |
| name  | varchar(20)| YES  |     | NULL    |       |
| city  | varchar(30)| YES  |     | NULL    |       |
| marks | int(3)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select * from stud;
+-----+-----+-----+-----+
| rno | name  | city  | marks |
+-----+-----+-----+-----+
| 2 | Jayu  | Nashik | NULL |
| 3 | Snehal | Pune   | NULL |
| 4 | Prachi | Nashik | NULL |
| 5 | Komu  | Pune   | NULL |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> update stud set marks=80 where rno=2;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> update stud set marks=60 where rno=3;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> select * from stud;
+-----+-----+-----+-----+
| rno | name  | city  | marks |
+-----+-----+-----+-----+
| 2 | Jayu  | Nashik | 80 |
```

3	Snehal	Pune	60
4	Prachi	Nashik	NULL
5	Komu	Pune	NULL

+-----+-----+-----+-----+

4 rows in set (0.00 sec)

//NULL Operator:-

mysql> select * from stud where marks is not null;

+-----+-----+-----+-----+

rno	name	city	marks
-----	------	------	-------

+-----+-----+-----+-----+

2	Jayu	Nashik	80
---	------	--------	----

3	Snehal	Pune	60
---	--------	------	----

+-----+-----+-----+-----+

2 rows in set (0.00 sec)

//Aggregate (COUNT):-

mysql> select count(*) from stud;

+-----+

count(*)

+-----+

4

+-----+

1 row in set (0.00 sec)

mysql> select count(marks) from stud;

+-----+

count(marks)

+-----+

2

+-----+

1 row in set (0.00 sec)

mysql> select count(*) from stud where city='Nashik';

+-----+

count(*)

+-----+

2

+-----+

1 row in set (0.00 sec)

mysql> select count(marks) from stud where city='Nashik';

+-----+

count(marks)

+-----+

1

+-----+

1 row in set (0.00 sec)

//AVERAGE:-

```
mysql> select avg(marks) from stud;
```

```
+-----+  
| avg(marks) |  
+-----+  
|   70.0000 |
```

```
+-----+  
1 row in set (0.00 sec)
```

```
mysql> select max(name) from stud;
```

```
+-----+  
| max(name) |  
+-----+  
| Snehal   |
```

```
+-----+  
1 row in set (0.00 sec)
```

```
mysql> select min(name) from stud;
```

```
+-----+  
| min(name) |  
+-----+  
| Jayu      |
```

```
+-----+  
1 row in set (0.00 sec)
```

```
mysql> select sum(name) from stud;
```

```
+-----+  
| sum(name) |  
+-----+  
|          0 |
```

```
+-----+  
1 row in set, 4 warnings (0.00 sec)
```

//GROUP BY & HAVING:-

```
mysql> select city,max(marks) from stud group by city;
```

```
+-----+-----+  
| city | max(marks) |  
+-----+-----+  
| Nashik |      80 |  
| Pune   |      70 |
```

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

```
mysql> select city,max(marks) from stud group by city having max(marks)>70;
```

```
+-----+-----+  
| city | max(marks) |  
+-----+-----+
```

```
| Nashik |      80 |  
+-----+-----+  
1 row in set (0.00 sec)
```

```
mysql> select city,avg(marks) from stud group by city having max(marks)>70;  
+-----+-----+  
| city | avg(marks) |  
+-----+-----+  
| Nashik | 65.0000 |  
+-----+-----+  
1 row in set (0.00 sec)
```

```
mysql> select city,avg(marks) from stud group by city having avg(marks)>70;  
Empty set (0.00 sec)
```

```
mysql> select city,min(marks) from stud group by city having min(marks)<70;  
+-----+-----+  
| city | min(marks) |  
+-----+-----+  
| Nashik | 50 |  
| Pune | 60 |  
+-----+-----+  
2 rows in set (0.00 sec)
```

//

ASSIGNMENT No:-4

DATE:-4/7/17

mysql> create database student;

mysql> use student;

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Database changed

mysql>

mysql> show tables;

+-----+

| Tables_in_student |

+-----+

| stud_info |

+-----+

1 row in set (0.00 sec)

mysql> desc stud_info;

+-----+-----+-----+-----+-----+-----+

| Field | Type | Null | Key | Default | Extra |

+-----+-----+-----+-----+-----+-----+

| rno | int(2) | YES | | NULL | |

| name | varchar(20) | YES | | NULL | |

| address | varchar(30) | YES | | NULL | |

+-----+-----+-----+-----+-----+-----+

3 rows in set (0.00 sec)

mysql> insert into stud_info values(1,'Abhay','Nashik');

Query OK, 1 row affected (0.01 sec)

mysql> insert into stud_info values(2,'Sarika','Pune');

Query OK, 1 row affected (0.01 sec)

mysql> insert into stud_info values(3,'Riya','Nashik');

Query OK, 1 row affected (0.01 sec)

mysql> insert into stud_info values(4,'Sachin','Manmad');

Query OK, 1 row affected (0.00 sec)

mysql> select * from stud_info;

+-----+-----+-----+

| rno | name | address |

+-----+-----+-----+

| 1 | Abhay | Nashik |

| 2 | Sarika | Pune |

| 3 | Riya | Nashik |

| 4 | Sachin | Manmad |

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

```
mysql> create table stud_marks(rno int(2),dbms int(3),toc int(3));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> desc stud_marks;
+-----+-----+-----+-----+
| Field | Type  | Null | Key | Default | Extra |
+-----+-----+-----+-----+
| rno   | int(2) | YES  |     | NULL    |       |
| dbms  | int(3) | YES  |     | NULL    |       |
| toc   | int(3) | YES  |     | NULL    |       |
+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

```
mysql> insert into stud_marks values(1,50,45),(2,67,65),(3,76,55),(5,70,50);
Query OK, 4 rows affected (0.00 sec)
Records: 4  Duplicates: 0  Warnings: 0
```

```
mysql> select * from stud_marks;
+-----+-----+-----+
| rno | dbms | toc |
+-----+-----+-----+
| 1   | 50   | 45  |
| 2   | 67   | 65  |
| 3   | 76   | 55  |
| 5   | 70   | 50  |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

//Natural Join:-

```
mysql> select stud_info.rno,name,dbms,toc from stud_info,stud_marks where
stud_info.rno=stud_marks.rno;
+-----+-----+-----+-----+
| rno | name  | dbms | toc |
+-----+-----+-----+-----+
| 1   | Abhay | 50   | 45  |
| 2   | Sarika | 67   | 65  |
| 3   | Riya  | 76   | 55  |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

//Left Join:-

```
mysql> select stud_info.rno,name,dbms,toc from stud_info left join stud_marks on
stud_info.rno=stud_marks.rno;
+-----+-----+-----+-----+
| rno | name  | dbms | toc |
```


1	Abhay	50	45
2	Sarika	67	65
3	Riya	76	55
4	Sachin	NULL	NULL

4 rows in set (0.00 sec)

//right Join:-

```
mysql> select stud_marks.rno,name,dbms,toc from stud_info right join stud_marks on stud_info.rno=stud_marks.rno;
```

rno	name	dbms	toc
1	Abhay	50	45
2	Sarika	67	65
3	Riya	76	55
5	NULL	70	50

4 rows in set (0.00 sec)

//View On Natuaral Join:-

```
mysql> create view v1 as select stud_info.rno,name,dbms,toc from stud_info,stud_marks where stud_info.rno=stud_marks.rno;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> select * from v1;
```

rno	name	dbms	toc
1	Abhay	50	45
2	Sarika	67	65
3	Riya	76	55

3 rows in set (0.00 sec)

//View On Left Join:-

```
mysql> create view v2 as select stud_info.rno,name,dbms,toc from stud_info left join stud_marks on stud_info.rno=stud_marks.rno;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> select * from v2;
```

rno	name	dbms	toc
1	Abhay	50	45
2	Sarika	67	65
3	Riya	76	55

4	Sachin	NULL	NULL
---	--------	------	------

4 rows in set (0.00 sec)

//View On Right Join:-

```
mysql> create view v3 as select stud_marks.rno,name,dbms,toc from stud_info right join
stud_marks on stud_info.rno=stud_marks.rno;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select * from v3;
+-----+-----+-----+-----+
| rno | name | dbms | toc |
+-----+-----+-----+-----+
| 1 | Abhay | 50 | 45 |
| 2 | Sarika | 67 | 65 |
| 3 | Riya | 76 | 55 |
| 5 | NULL | 70 | 50 |
+-----+-----+-----+-----+
4 rows in set (0.01 sec)
```

//DATE:-5/7/17

```
gurukul@ubuntu:~$ mysql -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 36
Server version: 5.5.37-0ubuntu0.12.10.1 (Ubuntu)
```

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| college |
| industry |
| mysql |
| performance_schema |
| student |
+-----+
6 rows in set (0.02 sec)
```

```
mysql> use industry;
```

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Database changed

```
mysql> show tables;
```

```
+-----+
| Tables_in_industry |
+-----+
| emp                |
| employee            |
| project             |
| v1                  |
+-----+
```

4 rows in set (0.00 sec)

```
mysql> create table Emp(Emp_id int(2),Ename varchar(10),City varchar(20),Post
varchar(20),Salary int(8));
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> desc Emp;
```

```
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Emp_id | int(2)    | YES  |     | NULL    |       |
| Ename  | varchar(10) | YES  |     | NULL    |       |
| City   | varchar(20) | YES  |     | NULL    |       |
| Post   | varchar(20) | YES  |     | NULL    |       |
| Salary | int(8)     | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
```

5 rows in set (0.00 sec)

```
mysql> insert into Emp values(1,'John','Nashik','Clerk',5000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into Emp values(2,'Seema','Aurangabad','Developer',20000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into Emp values(3,'Amita','Nagar','Manager',70000);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into Emp values(4,'Rakesh','Pune','Analyst',50000);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> select * from Emp;
```

```
+-----+-----+-----+-----+-----+
| Emp_id | Ename  | City   | Post   | Salary |
+-----+-----+-----+-----+-----+
```

```

+-----+-----+-----+-----+-----+
| 1 | John | Nashik | Clerk | 5000 |
| 2 | Seema | Aurangabad | Developer | 20000 |
| 3 | Amita | Nagar | Manager | 70000 |
| 4 | Rakesh | Pune | Analyst | 50000 |
+-----+-----+-----+-----+

```

4 rows in set (0.00 sec)

//Single subqueries:-

```
mysql> select * from Emp where Salary > (select Salary from Emp where Ename='John');
```

```

+-----+-----+-----+-----+-----+
| Emp_id | Ename | City | Post | Salary |
+-----+-----+-----+-----+
| 2 | Seema | Aurangabad | Developer | 20000 |
| 3 | Amita | Nagar | Manager | 70000 |
| 4 | Rakesh | Pune | Analyst | 50000 |
+-----+-----+-----+-----+

```

3 rows in set (0.00 sec)

```
mysql> select * from Emp where city = (select City from Emp where Ename='Rakesh');
```

```

+-----+-----+-----+-----+-----+
| Emp_id | Ename | City | Post | Salary |
+-----+-----+-----+-----+
| 4 | Rakesh | Pune | Analyst | 50000 |
+-----+-----+-----+-----+

```

1 row in set (0.00 sec)

```
mysql> select * from Emp where Salary < (select avg(Salary) from Emp);
```

```

+-----+-----+-----+-----+-----+
| Emp_id | Ename | City | Post | Salary |
+-----+-----+-----+-----+
| 1 | John | Nashik | Clerk | 5000 |
| 2 | Seema | Aurangabad | Developer | 20000 |
+-----+-----+-----+-----+

```

2 rows in set (0.00 sec)

```
mysql> select * from Emp where Salary = (select max(Salary) from Emp);
```

```

+-----+-----+-----+-----+-----+
| Emp_id | Ename | City | Post | Salary |
+-----+-----+-----+-----+
| 3 | Amita | Nagar | Manager | 70000 |
+-----+-----+-----+-----+

```

1 row in set (0.00 sec)

//Multiple subqueries:-

```
mysql> create table emp1(emp_id int(2),ename varchar(10),city varchar(20),post
varchar(15),salary int(10),deptno int(3));
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> desc emp1;
```

Field	Type	Null	Key	Default	Extra
emp_id	int(2)	YES		NULL	
ename	varchar(10)	YES		NULL	
city	varchar(20)	YES		NULL	
post	varchar(15)	YES		NULL	
salary	int(10)	YES		NULL	
deptno	int(3)	YES		NULL	

6 rows in set (0.00 sec)

```
mysql> insert into emp1 values(1,'john','nashik','clerk',5000,10);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into emp1 values(2,'seema','aurangabad','developer',20000,20);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into emp1 values(3,'amita','nagar','manager',70000,20);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into emp1 values(4,'rakesh','pune','analyst',8000,10);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into emp1 values(5,'samata','nashik','tester',20000,10);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into emp1 values(6,'ankita','chandwad','developer',30000,30);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into emp1 values(7,'bhavika','pune','team-lr',50000,30);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into emp1 values(8,'deepa','nashik','coe',90000,10);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> select * from emp1;
```

emp_id	ename	city	post	salary	deptno
1	john	nashik	clerk	5000	10
2	seema	aurangabad	developer	20000	20
3	amita	nagar	manager	70000	20
4	rakesh	pune	analyst	8000	10
5	samata	nashik	tester	20000	10
6	ankita	chandwad	developer	30000	30

7	bhavika	pune	team-lr	50000	30
8	deepa	nashik	coe	90000	10

8 rows in set (0.01 sec)

```
mysql> select ename,salary,deptno from emp1 where salary in (select min(salary) from emp1 group by deptno);
```

ename	salary	deptno
john	5000	10
seema	20000	20
samata	20000	10
ankita	30000	30

4 rows in set (0.00 sec)

```
mysql> select ename,salary,deptno from emp1 where salary > all (select salary from emp1 where post='developer');
```

ename	salary	deptno
amita	70000	20
bhavika	50000	30
deepa	90000	10

3 rows in set (0.01 sec)

```
mysql> select ename,salary,deptno from emp1 where salary < any (select salary from emp1 where post='developer');
```

ename	salary	deptno
john	5000	10
seema	20000	20
rakesh	8000	10
samata	20000	10

4 rows in set (0.00 sec)

```
mysql> select ename,salary,deptno from emp1 where salary > any (select salary from emp1 where post='developer');
```

ename	salary	deptno
amita	70000	20
ankita	30000	30
bhavika	50000	30

```
| deepa | 90000 | 10 |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

// Study Assignment:-

```
mysql> create table cust_info(c_id int(2),cname varchar(10),city varchar(20));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> desc cust_info;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| c_id  | int(2)    | YES  |     | NULL    |       |
| cname | varchar(10) | YES  |     | NULL    |       |
| city  | varchar(20) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> insert into cust_info values(1,'john','nashik');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into cust_info values(2,'seema','aurangabad');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into cust_info values(3,'amita','nagar');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into cust_info values(4,'rakesh','pune');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into cust_info values(5,'samata','nashik');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into cust_info values(6,'ankita','chandwad');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into cust_info values(7,'bhavika','pune');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into cust_info values(8,'deepa','mumbai');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into cust_info values(9,'nitin','nagpur');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into cust_info values(10,'pooja','pune');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from cust_info;
```

c_id	cname	city
1	john	nashik
2	seema	aurangabad
3	amita	nagar
4	rakesh	pune
5	samata	nashik
6	ankita	chandwad
7	bhavika	pune
8	deepa	mumbai
9	nitin	nagpur
10	pooja	pune

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

```
mysql> create table acc_info(c_id int(2),acc_type varchar(12),amount int(8));
```

```
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> desc acc_info;
```

Field	Type	Null	Key	Default	Extra
c_id	int(2)	YES		NULL	
acc_type	varchar(12)	YES		NULL	
amount	int(8)	YES		NULL	

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

```
mysql> insert into acc_info values(1,'current',5000);
```

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

```
mysql> insert into acc_info values(2,'saving',20000);
```

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

```
mysql> insert into acc_info values(3,'saving',70000);
```

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

```
mysql> insert into acc_info values(4,'saving',50000);
```

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

```
mysql> insert into acc_info values(6,'current',35000);
```

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

```
mysql> insert into acc_info values(7,'loan',30000);
```

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



```
mysql> insert into acc_info values(8,'saving',50000);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into acc_info values(9,'saving',90000);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into acc_info values(10,'loan',8000);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into acc_info values(11,'current',45000);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from acc_info;
```

```
+-----+-----+-----+
| c_id | acc_type | amount |
+-----+-----+-----+
|  1  | current  |  5000  |
|  2  | saving   | 20000  |
|  3  | saving   | 70000  |
|  4  | saving   | 50000  |
|  6  | current  | 35000  |
|  7  | loan     | 30000  |
|  8  | saving   | 50000  |
|  9  | saving   | 90000  |
| 10  | loan     |  8000  |
| 11  | current  | 45000  |
+-----+-----+-----+
```

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

Name : Sharma Sagar Ganesh

Class : TE comp B

Roll no. : 55

//////////ASSIGNMENT NO:-6 //////////

//////////Procedure with no parameters:-

mysql> delimiter //

mysql> create procedure Allstud()

-> begin

-> select * from stud;

-> end

-> //

Query OK, 0 rows affected (0.00 sec)

mysql> delimiter ;

mysql> call Allstud();

rno	name	city	marks
2	Jayu	Nashik	80
3	Snehal	Pune	60
4	Prachi	Nashik	50
5	Komu	Pune	70

4 rows in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

//////////Procedure with single parameter:-

mysql> delimiter //

mysql> create procedure p2(IN Sname varchar(20))

-> begin

-> select * from stud where name=Sname;

-> end;

-> //

Query OK, 0 rows affected (0.00 sec)

mysql> call p2('Jayu')//

rno	name	city	marks
2	Jayu	Nashik	80

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

//////////Procedure with multiple parameters:-

```
mysql> select *from stud;
-> //
```

```
+-----+-----+-----+-----+
| rno | name  | city  | marks |
+-----+-----+-----+-----+
| 2 | Jayu  | Nashik | 80 |
| 3 | Snehal | Pune   | 60 |
| 4 | Prachi | Nashik | 50 |
| 5 | Komu  | Pune   | 70 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

//////////UPDATE:-

```
mysql> create procedure p3(IN Rno1 int(3),Sname varchar(20))
-> begin
-> update stud set name=Sname where rno=Rno1;
-> end
-> //
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> delimiter ;
mysql> call p3(2,'Kritika');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select *from stud;
+-----+-----+-----+-----+
| rno | name  | city  | marks |
+-----+-----+-----+-----+
| 2 | Kritika | Nashik | 80 |
| 3 | Snehal | Pune   | 60 |
| 4 | Prachi | Nashik | 50 |
| 5 | Komu  | Pune   | 70 |
+-----+-----+-----+-----+
4 rows in set (0.01 sec)
```

//////////INSERT:-

```
mysql> create procedure p6(IN Rno1 int(3),Sname varchar(20),City_name
varchar(20),Marks int(3))
-> begin
-> insert into stud values(Rno1,Sname,City_name,marks);
-> end
-> //
```

Query OK, 0 rows affected (0.00 sec)

mysql> delimiter ;

mysql> call p6(8,'Krushna','Nashik',90);

Query OK, 1 row affected (0.00 sec)

mysql> select * from stud;

rno	name	city	marks
2	Kritika	Nashik	80
3	Snehal	Pune	60
4	Prachi	Nashik	50
5	Komu	Pune	70
8	Krushna	Nashik	90

5 rows in set (0.01 sec)

////////DELETE:-

mysql> select * from stud;

rno	name	city	marks
2	Kritika	Nashik	80
3	Snehal	Pune	60
4	Prachi	Nashik	50
5	Komu	Pune	70
8	Krushna	Nashik	90

5 rows in set (0.01 sec)

mysql> delimiter //

mysql> create procedure p7()

-> begin

-> delete from stud where rno=2;

-> end

-> //

Query OK, 0 rows affected (0.00 sec)

mysql> delimiter ;

mysql> call p7();

Query OK, 1 row affected (0.00 sec)

mysql> select * from stud;

rno	name	city	marks
-----	------	------	-------

```
| 3 | Snehal | Pune | 60 |
| 4 | Prachi | Nashik | 50 |
| 5 | Komu | Pune | 70 |
| 8 | Krushna | Nashik | 90 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
////////////////////////////////////
```

/// OUT Parameter:-

```
mysql> select * from stud;
+-----+-----+-----+-----+
| rno | name | city | marks |
+-----+-----+-----+-----+
| 3 | Snehal | Pune | 60 |
| 4 | Prachi | Nashik | 50 |
| 5 | Komu | Pune | 70 |
| 8 | Krushna | Nashik | 90 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> delimiter //
mysql> create procedure s1(OUT Sname varchar(20))
-> begin
-> select name into Sname from stud where rno=3;
-> end;
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> call s1(@Sname)//
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select @Sname//
+-----+
| @Sname |
+-----+
| Snehal |
+-----+
1 row in set (0.00 sec)
```

```
////////////////////////////////////
```

OUT with more than 1 select stmt:-

```
mysql> create procedure s2(IN Rno1 int(3),Sname varchar(20))
-> begin
-> select * from stud where rno=Rno1;
-> select * from stud where name=Sname;
-> select * from stud;
```

```
-> end;
```

```
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> call s2(3,'Snehal')//
```

```
+-----+-----+-----+-----+
| rno | name  | city | marks |
+-----+-----+-----+-----+
|  3 | Snehal | Pune |  60 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

```
+-----+-----+-----+-----+
| rno | name  | city | marks |
+-----+-----+-----+-----+
|  3 | Snehal | Pune |  60 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

```
+-----+-----+-----+-----+
| rno | name  | city | marks |
+-----+-----+-----+-----+
|  3 | Snehal | Pune |  60 |
|  4 | Prachi | Nashik |  50 |
|  5 | Komu  | Pune |  70 |
|  8 | Krushna | Nashik |  90 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

Query OK, 0 rows affected (0.00 sec)

```
////////////////////////////////////
```

INOUT:-

```
mysql> create procedure s3(IN Rno1 int(3),OUT Sname varchar(20))
```

```
-> begin
```

```
-> select name into Sname from stud where rno=Rno1;
```

```
-> end
```

```
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> delimiter ;
```

```
mysql> call s3(3,@Sname);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> select @Sname;
```

```
+-----+
| @Sname |
```

```
+-----+
| Snehal |
+-----+
1 row in set (0.00 sec)
```

////////////////////////////////////

INOUT Parameter Example:-

```
mysql> delimiter $
mysql> create procedure set_counter(INOUT count int(4))
-> begin
-> set count=count+10;
-> end
-> $
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> delimiter ;
mysql> set @count=1;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> call set_counter(@count);
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select @count;
+-----+
| @count |
+-----+
|    11 |
+-----+
1 row in set (0.00 sec)
```

////////////////////////////////////

CONTROL STATEMENT Example:-

```
mysql> delimiter //
mysql> create procedure s5(IN Rno1 int(3))
-> begin
-> Declare marks1 int;
-> if(Rno1>5) then
-> set marks1=70;
-> else
-> set marks1=90;
-> end if;
-> update stud set marks=marks1 where rno=Rno1;
-> end
-> //
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> delimiter ;
mysql> call s5(3);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from stud;
+-----+-----+-----+-----+
| rno | name  | city  | marks |
+-----+-----+-----+-----+
| 3 | Snehal | Pune  | 90 |
| 4 | Prachi | Nashik | 50 |
| 5 | Komu  | Pune  | 70 |
| 8 | Krushna | Nashik | 90 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

////////////////////////////////////
 ASSIGNMENT:-

```
mysql> create table Borrower(Roll_no int(3),Name varchar(20),Dateofissue
date,NameofBook varchar(20),Status varchar(5));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> insert into Borrower values(1,'Amita',"2017-06-25",'Java','I');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Borrower values(2,'Sonakshi',"2017-07-10",'Networking','I');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Borrower values(3,'Nira',"2017-05-22",'MySQL','I');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Borrower values(4,'Jagdish',"2017-06-10",'DBMS','I');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Borrower values(5,'Jayshri',"2017-07-05",'MySQL','I');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Borrower values(6,'Kiran',"2017-06-30",'Java','I');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from Borrower;
+-----+-----+-----+-----+-----+
| Roll_no | Name  | Dateofissue | NameofBook | Status |
+-----+-----+-----+-----+-----+
| 1 | Amita | 2017-06-25 | Java      | I      |
| 2 | Sonakshi | 2017-07-10 | Networking | I      |
| 3 | Nira  | 2017-05-22 | MySQL     | I      |
| 4 | Jagdish | 2017-06-10 | DBMS      | I      |
```


5	Jayshri	2017-07-05	MySQL	I
6	Kiran	2017-06-30	Java	I

6 rows in set (0.00 sec)

```
mysql> create table Fine(Roll_no int(3),Date date,Amt int(5));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select * from Fine;
Empty set (0.00 sec)
```

```
mysql> desc Fine;
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| Roll_no | int(3) | YES | | NULL | |
| Date | date | YES | | NULL | |
| Amt | int(5) | YES | | NULL | |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> delimiter $
mysql> create procedure p1(IN rno int(3),name varchar(20))
-> begin
-> update Borrower set Status='R' where Roll_no=rno and NameofBook=name;
-> end;
-> $
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> delimiter ;
mysql> call p1(1,'Java');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from Borrower;
+-----+-----+-----+-----+-----+
| Roll_no | Name | Dateofissue | NameofBook | Status |
+-----+-----+-----+-----+-----+
| 1 | Amita | 2017-06-25 | Java | R |
| 2 | Sonakshi | 2017-07-10 | Networking | I |
| 3 | Nira | 2017-05-22 | MySQL | I |
| 4 | Jagdish | 2017-06-10 | DBMS | I |
| 5 | Jayshri | 2017-07-05 | MySQL | I |
| 6 | Kiran | 2017-06-30 | Java | I |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

////////////////////////////////////

```
mysql> create procedure ppp(IN rno1 int(3),name1 varchar(30))
-> begin
-> Declare i_date date;
-> Declare diff int;
-> Declare fine_amt int;
-> select Dateofissue into i_date from Borrower where Roll_no=rno1 and
NameofBook=name1;
-> select DATEDIFF(CURDATE(),i_date) into diff;
-> if(diff>=15 and diff<=30)then
-> SET fine_amt=diff*5;
-> insert into Fine values(rno1,CURDATE(),fine_amt);
-> elseif(diff>30)then
-> SET fine_amt=diff*50;
-> insert into Fine values(rno1,CURDATE(),fine_amt);
-> End if;
-> update Borrower set status='R' where Roll_no=rno1 and NameofBook=name1;
-> end;
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> call ppp(3,'MySQL');
```

```
-> //
```

Query OK, 1 row affected (0.00 sec)

```
mysql> select * from Borrower;
```

```
-> //
```

```
+-----+-----+-----+-----+
| Roll_no | Name   | Dateofissue | NameofBook | Status |
+-----+-----+-----+-----+
| 1 | Amita | 2017-06-25 | Java      | R      |
| 2 | Sonakshi | 2017-07-10 | Networking | I      |
| 3 | Nira   | 2017-05-22 | MySQL     | R      |
| 4 | Jagdish | 2017-06-10 | DBMS      | I      |
| 5 | Jayshri | 2017-07-05 | MySQL     | I      |
| 6 | Kiran  | 2017-06-30 | Java      | I      |
+-----+-----+-----+-----+
```

6 rows in set (0.00 sec)

```
mysql> select * from Fine;
```

```
-> //
```

```
+-----+-----+-----+
| Roll_no | Date   | Amt |
+-----+-----+-----+
| 3 | 2017-07-18 | 2850 |
+-----+-----+-----+
```

1 row in set (0.00 sec)

Name : Sharma Sagar Ganesh
Class : TE comp B
Roll no. : 55

//

ASIGNMENT NO:- 7

//

CURSOR:-

mysql> show databases;

Database
information_schema
college
industry
mysql
performance_schema
student
xyz

7 rows in set (0.01 sec)

mysql> use industry;

Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed

mysql> show tables;

Tables_in_industry
Emp
acc_info
cust_info
emp
emp1
employee
project
v1

8 rows in set (0.00 sec)

mysql> desc Emp;

```

+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Emp_id | int(2)     | YES  |     | NULL    |       |
| Ename  | varchar(10)| YES  |     | NULL    |       |
| City   | varchar(20)| YES  |     | NULL    |       |
| Post   | varchar(20)| YES  |     | NULL    |       |
| Salary | int(8)     | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```

```
mysql> select * from Emp;
```

```
+-----+-----+-----+-----+-----+
| Emp_id | Ename  | City      | Post      | Salary |
+-----+-----+-----+-----+-----+
| 1 | John  | Nashik    | Clerk     | 5000   |
| 2 | Seema | Aurangabad | Developer | 20000  |
| 3 | Amita | Nagar     | Manager   | 70000  |
| 4 | Rakesh | Pune      | Analyst   | 50000  |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

////////////////////////////////////

```
mysql> delimiter //
```

```
mysql> create procedure sal_cur2()
```

```
-> begin
-> declare eno1 int(2);
-> declare sal1 int(20);
-> declare exit_loop boolean;
-> declare c1 cursor for select Emp_id,Salary from Emp;
-> declare continue handler for not found set exit_loop=true;
-> open c1;
-> emp_loop:loop
-> fetch c1 into eno1,sal1;
-> select eno1,sal1;
-> if exit_loop then
-> close c1;
-> leave emp_loop;
-> end if;
-> end loop emp_loop;
-> end
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> call sal_cur2();
```

$\rightarrow //$

```
+-----+-----+
| eno1 | sal1 |
```

```

+-----+-----+
|  1 | 5000 |
+-----+-----+

```

```

+-----+-----+
| eno1 | sal1 |
+-----+-----+
|    2 | 20000 |
+-----+-----+

```

```

+-----+-----+
| eno1 | sal1 |
+-----+-----+
|   3 | 70000 |
+-----+-----+

```

```

+-----+-----+
| eno1 | sal1 |
+-----+-----+
|   4 | 50000 |
+-----+-----+

```

```

+-----+-----+
| eno1 | sal1 |
+-----+-----+
|   4 | 50000 |
+-----+-----+

```

Query OK, 0 rows affected, 1 warning (0.00 sec)

////////////////////////////////////

```
mysql> delimiter //
```

```
mysql> create procedure sal()
```

-> begin

```
-> declare eno1 int(3);
```

```
-> declare sal1 int(20);
```

-> declare exit_loop boolean;

```
-> declare c2 cursor for select Emp_id,Salary from Emp;
```

```
-> declare continue handler for not found set exit_loop=true;
```

```
-> open c2;
```

```
-> emp_loop:loop
```

```
-> fetch c2 into eno1,sal1;
```

-> if sal1>4000 then

```

-> update Emp set Salary=sal1+5000 where Emp_id=eno1;
-> else update Emp set Salary=sal1+1000 where Emp_id=eno1;
-> end if;
-> if exit_loop then close c2;
-> leave emp_loop;
-> end if;
-> end loop emp_loop;
-> end
//

```

Query OK, 0 rows affected (0.00 sec)

```
mysql> call sal();
```

```
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> select * from Emp;
```

```
-> //
```

```

+-----+-----+-----+-----+
| Emp_id | Ename | City   | Post   | Salary |
+-----+-----+-----+-----+
| 1 | John | Nashik | Clerk  | 10000 |
| 2 | Seema | Aurangabad | Developer | 25000 |
| 3 | Amita | Nagar   | Manager | 75000 |
| 4 | Rakesh | Pune    | Analyst | 55000 |
+-----+-----+-----+-----+

```

4 rows in set (0.00 sec)

```
////////////////////////////////////
```

ASSIGNMENT:-

```
mysql> create table O_rollcall(rno int(3) primary key,name varchar(20),addr varchar(30));
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> insert into O_rollcall values(1,'Amit','Nashik');
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into O_rollcall values(2,'Shital','Pune');
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into O_rollcall values(3,'Ranak','Manmad');
```

Query OK, 1 row affected (0.00 sec)

```
mysql> select * from O_rollcall;
```

```

+-----+-----+-----+
| rno | name | addr |
+-----+-----+-----+
| 1 | Amit | Nashik |
| 2 | Shital | Pune |

```

```
| 3 | Ranak | Manmad |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> create table N_rollcall(rno int(3),name varchar(20),addr varchar(30));Query OK, 0
rows affected (0.00 sec)
```

```
mysql> select * from N_rollcall;
Empty set (0.01 sec)
```

```
mysql> insert into N_rollcall select * from O_rollcall;
Query OK, 3 rows affected (0.01 sec)
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> select * from N_rollcall;
+-----+-----+-----+
| rno | name | addr |
+-----+-----+-----+
| 1 | Amit | Nashik |
| 2 | Shital | Pune |
| 3 | Ranak | Manmad |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> delete from N_rollcall;
Query OK, 3 rows affected (0.00 sec)
```

```
mysql> select * from N_rollcall;
Empty set (0.00 sec)
```

```
////////////////////////////////////
Paraterized Procedure:-
```

```
mysql> delimiter //
mysql> create procedure new1(IN rno1 int(3))
-> begin
-> if not exists (select * from N_rollcall where rno=rno1) then
-> insert into N_rollcall select * from O_rollcall where rno=rno1;
-> end if;
-> end
-> //
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> call new1(1)//
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from N_rollcall;
-> //
```

```

+-----+-----+-----+
| rno | name | addr |
+-----+-----+-----+
| 1 | Amit | Nashik |
+-----+-----+-----+
1 row in set (0.00 sec)

```

////////////////////////////////////
Paraterized Cursor:-

```

mysql> create procedure new2(IN rno1 int(3))
-> begin
-> declare rno2 int(3);
-> declare exit_loop boolean;
-> declare c1 cursor for select rno from O_rollcall where rno=rno1;
-> declare continue handler for not found set exit_loop=true;
-> open c1;
-> emp_loop:loop
-> fetch c1 into rno2;
-> if not exists (select * from N_rollcall where rno=rno2) then
-> insert into N_rollcall select * from O_rollcall where rno=rno2;
-> end if;
-> if exit_loop then
-> close c1;
-> leave emp_loop;
-> end if;
-> end loop emp_loop;
-> end
-> //

```

Query OK, 0 rows affected (0.00 sec)

```

mysql> call new2(1);
-> //

```

Query OK, 0 rows affected, 1 warning (0.00 sec)

```

mysql> select * from N_rollcall;
-> //

```

```

+-----+-----+-----+
| rno | name | addr |
+-----+-----+-----+
| 1 | Amit | Nashik |
+-----+-----+-----+
1 row in set (0.00 sec)

```


Name : Sharma Sagar Ganesh
Class : TE comp B
Roll no. : 55

////////////////////////////////////

ASSIGNMENT NO:- 8

////////////////////////////////////

STORED FUNCTION:-

```
mysql> delimiter //
mysql> create function add1(a int,b int)returns int
-> begin
-> declare c int;
-> set c=a+b;
-> return c;
-> end;
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> select add1(10,20);
-> //
```

```

+-----+
| add1(10,20) |
+-----+
|      30      |
+-----+

```

1 row in set (0.01 sec)

////////////////////////////////////

```
mysql> create function max1(n1 int,n2 int)returns int
-> begin
-> declare maxno1 int;
-> if (n1>n2) then
-> set maxno1=n1;
-> else
-> set maxno1=n2;
->return maxno1;
-> end if;
->end;
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> select max1(2,5);
-> //
```

$$+ \text{-----} +$$

```
| max1(2,5) |
+-----+
|      5 |
+-----+
1 row in set (0.00 sec)
```

```
/////////////////////////////////////////////////////////////////
mysql> select * from stud//
+----+-----+-----+-----+
| rno | name  | city  | marks |
+----+-----+-----+-----+
|  3 | Snehal | Pune  |  90 |
|  4 | Prachi | Nashik |  50 |
|  5 | Komu   | Pune  |  70 |
|  8 | Krushna | Nashik |  90 |
+----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> create function Rname(rno1 int)returns varchar(20)
-> begin
-> declare sname varchar(20);
-> select name into sname from stud where rno=rno1;
-> return sname;
-> end;
-> //
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select Rname(3);
-> //
+-----+
| Rname(3) |
+-----+
| Snehal   |
+-----+
1 row in set (0.00 sec)
```

ASSIGNMENT:-

```
mysql> create table stud_marks(name varchar(20),total_marks int(8));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> insert into stud_marks values('Jayu',1000);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into stud_marks values('Snehal',1200);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into stud_marks values('Komal',1300);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into stud_marks values('Pooja',800);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into stud_marks values('Neha',900);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into stud_marks values('Reena',850);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into stud_marks values('Priynka',875);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into stud_marks values('Rahul',1100);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from stud_marks;
```

```
+-----+-----+
| name   | total_marks |
+-----+-----+
| Jayu   | 1000        |
| Snehal | 1200        |
| Komal  | 1300        |
| Pooja  | 800         |
| Neha   | 900         |
| Reena  | 850         |
| Priynka| 875         |
| Rahul  | 1100        |
+-----+-----+
```

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

```
mysql> create table Result(roll int(3),name varchar(20),class varchar(5));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> insert into Result values(1,'Jayu','TE');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Result values(2,'Snehal','TE');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Result values(2,'Komal','BE');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Result values(2,'Pooja','SE');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Result values(2,'Neha','FE');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Result values(2,'Reena','SE');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Result values(2,'Priynka','FE');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into Result values(2,'Rahul','BE');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from Result;
```

```
+-----+-----+-----+
| roll | name  | class |
+-----+-----+-----+
| 1 | Jayu  | TE    |
| 2 | Snehal | TE    |
| 2 | Komal  | BE    |
| 2 | Pooja  | SE    |
| 2 | Neha   | FE    |
| 2 | Reena  | SE    |
| 2 | Priynka | FE    |
| 2 | Rahul  | BE    |
+-----+-----+-----+
```

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

```
////////////////////////////////////////////////////////////////
```

```
mysql> create function Forgrade(name1 varchar(20)) returns varchar(20)
-> begin
-> declare grade varchar(20);
-> declare mark1 int;
-> select total_marks into mark1 from stud_marks where name=name1;
-> if(mark1>=990 and mark1<=1500) then
-> set grade='Distinction';
-> elseif (mark1>=900 and mark1<=989) then
-> set grade='First class';
-> elseif (mark1>=825 and mark1<=899) then
-> set grade='Higher second class';
-> end if;
-> return grade;
-> end;
-> //
```

```
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select Forgrade('Jayu')//
```

```
+-----+  
| Forgrade('Jayu') |  
+-----+  
| Distinction      |  
+-----+  
1 row in set (0.00 sec)
```

```
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
```

H.W.:=

Update the class to grade using inner join query:-

```
mysql> delimiter //
```

```
mysql> create function Forgrade(name1 varchar(20)) returns varchar(20)
```

```
begin
```

```
    declare grade varchar(20);
```

```
    declare mark1 int;
```

```
    select total_marks into mark1 from stud_marks where name=name1;
```

```
    if(mark1>=990 and mark1<=1500) then
```

```
        set grade='Distinction';
```

```
    elseif (mark1>=900 and mark1<=989) then
```

```
        set grade='First class';
```

```
    elseif (mark1>=825 and mark1<=899) then
```

```
        set grade='Higher second class';
```

```
    end if;
```

```
update
```

```
    return grade;
```

```
end;
```

```
//
```

