```
mysql> use emp
Database changed
mysql> create table employee
    -> (Emp_id varchar(5) Primary Key,
    -> Name varchar(10),
    -> Age int,
    -> Department varchar(10),
    -> Salary int);
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> insert into employee values
    -> (1,'Jhon',25,'IT',70000),
    -> (2,'Jane',26,'HR',80000),
    -> (3,'Matt',27,'IT',90000),
    -> (4,'Woods',28,'IT',90000),
    -> (5,'Sam',28,'HR',85000);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

```
mysql> alter table employee
    -> add Gender varchar(10);
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> alter table employee
    -> modify column Salary Decimal(10,2);
Query OK, 5 rows affected (0.06 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

```
mysql> alter table employee
    -> drop age;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> update employee
    -> set salary=58000
    -> where emp_id=2;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select name from employee where name like '%Singh';
Empty set (0.01 sec)
```

```
mysql> select * from employee
    -> order by salary asc;
+--------+--------+------------+----------+--------+
| Emp_id | Name   | Department | Salary   | Gender |
+--------+--------+------------+----------+--------+
| 2      | Jane   | HR         | 58000.00 | NULL   |
| 1      | Jhon   | IT         | 70000.00 | NULL   |
| 5      | Sam    | HR         | 85000.00 | NULL   |
| 3      | Matt   | IT         | 90000.00 | NULL   |
| 4      | Woods  | IT         | 90000.00 | NULL   |
+--------+--------+------------+----------+--------+
5 rows in set (0.00 sec)
```

```
mysql> create database sales;
Query OK, 1 row affected (0.01 sec)

mysql> use sales;
Database changed
mysql> create table sales
    -> (SalesmanID varchar(5),
    -> Name varchar(10),
    -> Sales int,
    -> LocationID varchar(5));
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> insert into sales values
    -> ('S1','Jhon',1400000,'L2'),
    -> ('S2','Jane',4236000,'L3'),
    -> ('S3','Matt',1200000,'L2'),
    -> ('S4','Woods',1300000,'L1'),
    -> ('S5','Sam',1350000,'L1');
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

```
mysql> create table Locations
    -> (LocationID varchar(5),
    -> Location_Name varchar(50));
Query OK, 0 rows affected (0.02 sec)

mysql> insert into Locations values
    -> ('L1','Kamar-Taj'),
    -> ('L2','Wakanda'),
    -> ('L3','Tonsberg');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
mysql> select SalesmanID,Name, LocationID, Location_Name from sales, locations
    -> where sales.Location_ID=locations.LocationID;
+------------+-------+------------+---------------+
| SalesmanID | Name  | LocationID | Location_Name |
+------------+-------+------------+---------------+
| S1         | Jhon  | L2         | Wakanda       |
| S2         | Jane  | L3         | Tonsberg      |
| S3         | Matt  | L2         | Wakanda       |
| S4         | Woods | L1         | Kamar-Taj     |
| S5         | Sam   | L1         | Kamar-Taj     |
+------------+-------+------------+---------------+
5 rows in set (0.00 sec)
```

```
mysql> select name, sales from sales
    -> where sales>=1300000;
+--------+---------+
| name   | sales   |
+--------+---------+
| Jhon   | 1400000 |
| Jane   | 4236000 |
| Woods  | 1300000 |
| Sam    | 1350000 |
+--------+---------+
4 rows in set (0.00 sec)
```

```
mysql> update sales
    -> set location_ID='104'
    -> where salesmanid like 'S3';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select*from sales;
+------------+-------+---------+-------------+
| SalesmanID | Name  | Sales   | Location_ID |
+------------+-------+---------+-------------+
| S1         | Jhon  | 1400000 | L2          |
| S2         | Jane  | 4236000 | L3          |
| S3         | Matt  | 1200000 | 104         |
| S4         | Woods | 1300000 | L1          |
| S5         | Sam   | 1350000 | L1          |
+------------+-------+---------+-------------+
5 rows in set (0.00 sec)
```

```
mysql> select count(sales) from sales;
+--------------+
| count(sales) |
+--------------+
|            5 |
+--------------+
1 row in set (0.00 sec)
```

```
mysql> create table TicketDetails
    -> (Tcode varchar(5),
    -> Acode varchar(5),
    -> Foreign Key (Acode) references AgentDetails(Acode));
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> create table AgentDetails
    -> (Acode varchar(5) Primary key,
    -> Aname varchar(50),
    -> Tickets_booked int);
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> insert into agentdetails values
    -> ('1','Mr.Ayush',10000),
    -> ('2','Mark',1200),
    -> ('3','Jane',1300);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> insert into ticketdetails values
    -> ('T1','1'),
    -> ('T2','1'),
    -> ('T3','2'),
    -> ('T4','1'),
    -> ('T5','2');
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

```
mysql> select Tcode,Acode,Aname, Tickets_booked from agentdetails, ticketdetails
    -> where agentdetails.A_code=ticketdetails.Acode;
+--------+--------+-----------+----------------+
| Tcode  | Acode  | Aname     | Tickets_booked |
+--------+--------+-----------+----------------+
| T1     | 1      | Mr.Ayush  |          10000 |
| T2     | 1      | Mr.Ayush  |          10000 |
| T3     | 2      | Mark      |           1200 |
| T4     | 1      | Mr.Ayush  |          10000 |
| T5     | 2      | Mark      |           1200 |
+--------+--------+-----------+----------------+
5 rows in set (0.00 sec)
```

```
mysql> select Aname, tickets_booked from agentdetails
    -> where Aname like 'Mr.Ayush';
+-----------+----------------+
| Aname     | tickets_booked |
+-----------+----------------+
| Mr.Ayush  |          10000 |
+-----------+----------------+
1 row in set (0.00 sec)
```

```
mysql> select Acode,Aname,Tcode from agentdetails, ticketdetails
    -> where agentdetails.A_code=ticketdetails.Acode
    -> having Aname like '%k';
+-------+-------+-------+
| Acode | Aname | Tcode |
+-------+-------+-------+
| 2     | Mark  | T3    |
| 2     | Mark  | T5    |
+-------+-------+-------+
2 rows in set (0.00 sec)
```

```
This is all the data:
[(114, 'Jhon', 111111), (115, 'Jane', 222222), (116, 'Matt', 333333), (117, 'Woods', 444444), (118, 'Sam', 555555)]

The number of rows in the table are: 5

This is the first row of the table: (114, 'Jhon', 111111)
```

```
The#quick#brown#fox#jumps#over#the#lazy#dog
The#five#boxing#wizards#jump#quickly
Six#big#devils#from#Japan#quickly#forgot#how#to#waltz
```

```
(1, 'Jhon')
```

```
This is the first file:
The quick brown fox jumps over the lazy dog
The five boxing wizards jump quickly
Six big devils from Japan quickly forgot how to waltz
This line is the fourth line
This line is the fifth line


This is the second file:
This line is the fourth line
This line is the fifth line
```

```
There are 192 characters in the file.
There are 52 vowels in the file.
There are 108 consonants in the file.
There are 6 uppercase characters in the file.
There are 149 lowercase characters in the file.
```

```
import random
print(random.randint(1,6))
4
```

```
Menu
1.Push
2.Pop
3.Peek
4.Display
5.Exit
Please enter your choice of menu item:1

Please enter the data you want to add to the stack:a
a has been added to the stack

Menu
1.Push
2.Pop
3.Peek
4.Display
5.Exit
Please enter your choice of menu item:1

Please enter the data you want to add to the stack:b
b has been added to the stack

Menu
1.Push
2.Pop
3.Peek
4.Display
5.Exit
Please enter your choice of menu item:1

Please enter the data you want to add to the stack:c
c has been added to the stack
```

```
Menu
1.Push
2.Pop
3.Peek
4.Display
5.Exit
Please enter your choice of menu item:2

The is the popped item: c
```

```
Menu
1.Push
2.Pop
3.Peek
4.Display
5.Exit
Please enter your choice of menu item:3

This is the top-most item: b
```

```
Menu
1.Push
2.Pop
3.Peek
4.Display
5.Exit
Please enter your choice of menu item:4

b <----Top
a
```

```
Menu
1.Push
2.Pop
3.Peek
4.Display
5.Exit
Please enter your choice of menu item:5

Thank You!
Hope you have a nice day!
```

```
Please enter a number: 123
123 is not an Armstrong number
```

```
Please enter a number: 153
153 is an Armstrong number
```

```
Please enter the number you want to check:1
1 is not a perfect number.
```

```
Please enter the number you want to check:6
6 is a perfect number.
```