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Practical No.: 1

Name of the Practical: - Write a program to demonstrate Identifiers, Reserve words & constants in Python.

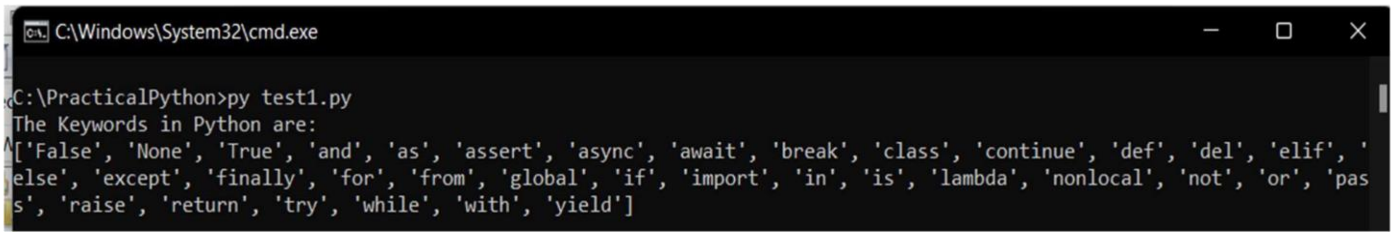
Software Required: - Python 3.10.4, Editplus 5.5

Program:

A) Importing Keywords: -

```
import keyword
print("The Keywords in Python are: ")
print(keyword.kwlist)
```

Output: -

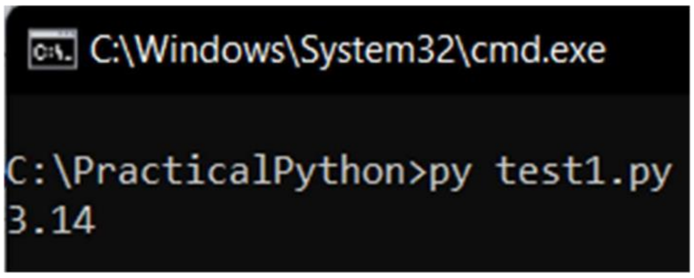


```
C:\PracticalPython>py test1.py
The Keywords in Python are:
['False', 'None', 'True', 'and', 'as', 'assert', 'async', 'await', 'break', 'class', 'continue', 'def', 'del', 'elif', '
else', 'except', 'finally', 'for', 'from', 'global', 'if', 'import', 'in', 'is', 'lambda', 'nonlocal', 'not', 'or', 'pas
s', 'raise', 'return', 'try', 'while', 'with', 'yield']
```

B) Constant: -

```
PI = 3.14
print(PI)
```

Output: -

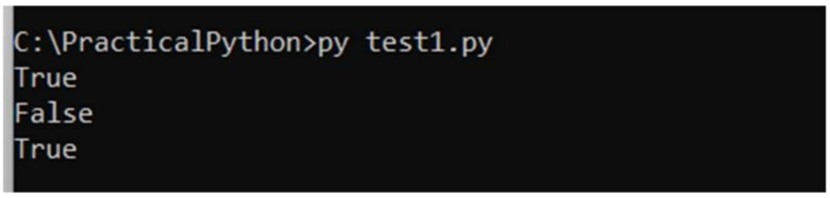


```
C:\PracticalPython>py test1.py
3.14
```

C) Identifier: -

```
print("aBc".isidentifier())
print("@s".isidentifier())
print("ff34_".isidentifier())
```

Output :-



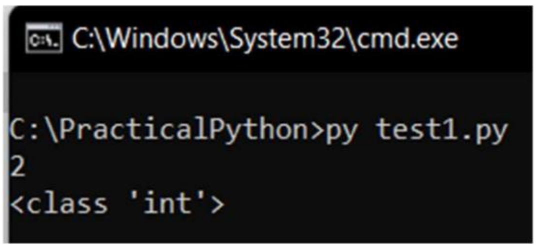
```
C:\PracticalPython>py test1.py
True
False
True
```

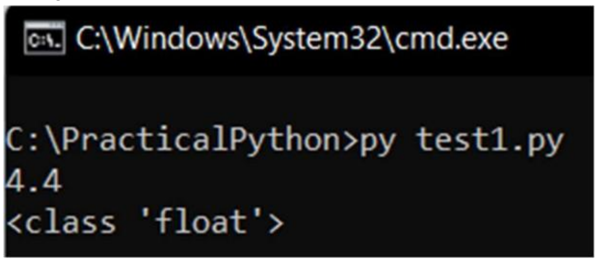
Practical No.: 2

Name of Practical: - Write a program to Interpret Data Types in Python.

Software Required: - Python 3.10.4, Editplus 5.5

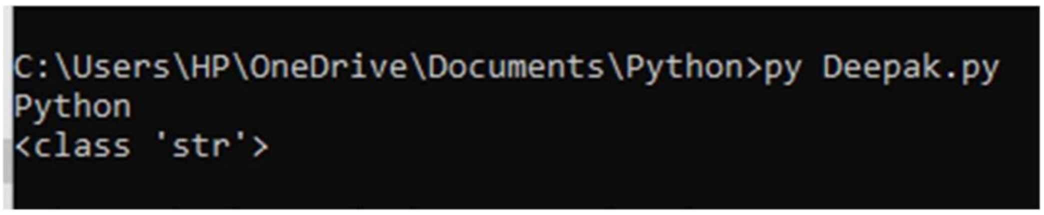
Programs: -

1) **Integer (int):-**
   Input: -
   ```
   x = 2
   print(x)
   print(type(x))
   ```
   Output: -
   
   ```
   C:\Windows\System32\cmd.exe

   C:\PracticalPython>py test1.py
   2
   <class 'int'>
   ```

2) **Float (float): -**
   Input: -
   ```
   x = 4.4
   print(x)
   print(type(x))
   ```
   Output: -
   
   ```
   C:\Windows\System32\cmd.exe

   C:\PracticalPython>py test1.py
   4.4
   <class 'float'>
   ```

3) **String (str): -**
   Input: -
   ```
   x = 'Python'
   print(x)
   print(type(x))
   ```

Output: -



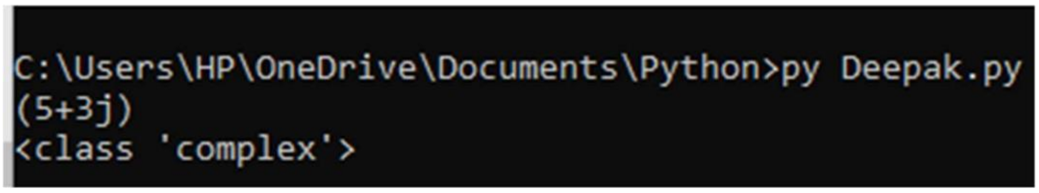
```
C:\Users\HP\OneDrive\Documents\Python>py Deepak.py
Python
<class 'str'>
```

4) **Complex (complex): -**

Input: -

```
x = 5+3j
print(x)
print(type(x))
```

Output: -



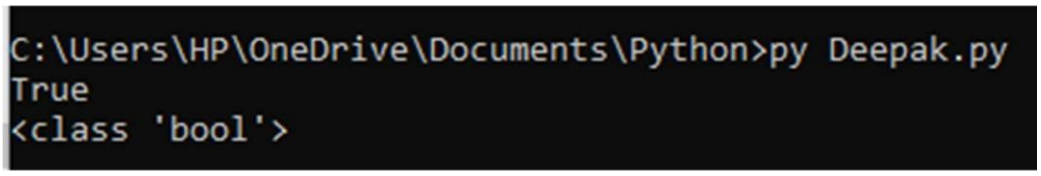
```
C:\Users\HP\OneDrive\Documents\Python>py Deepak.py
(5+3j)
<class 'complex'>
```

5) **Boolean (bool): -**

Input: -

```
x = True
print(x)
print(type(x))
```

Output: -



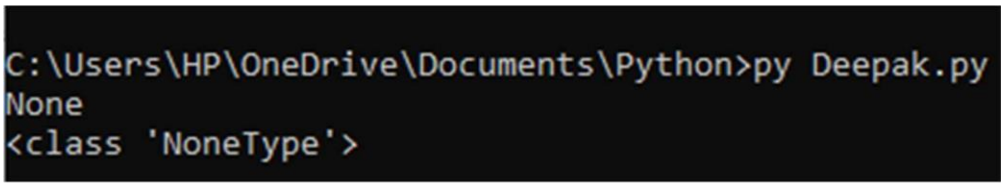
```
C:\Users\HP\OneDrive\Documents\Python>py Deepak.py
True
<class 'bool'>
```

6) **None (NoneType): -**

Input: -

```
x = None
print(x)
print(type(x))
```

Output: -



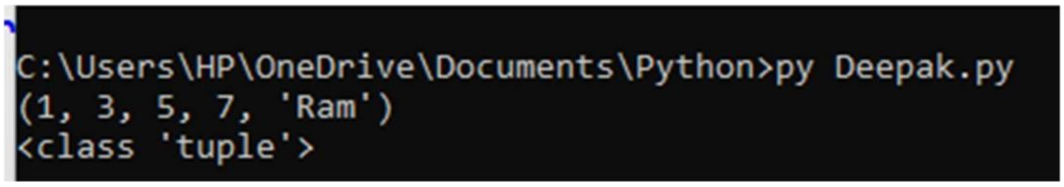
```
C:\Users\HP\OneDrive\Documents\Python>py Deepak.py
None
<class 'NoneType'>
```

7) **Tuple (tuple): -**

Input: -

```
T = (1, 3, 5, 7, ’Ram’)
 print(T)
 print(type(T))
```

Output: -



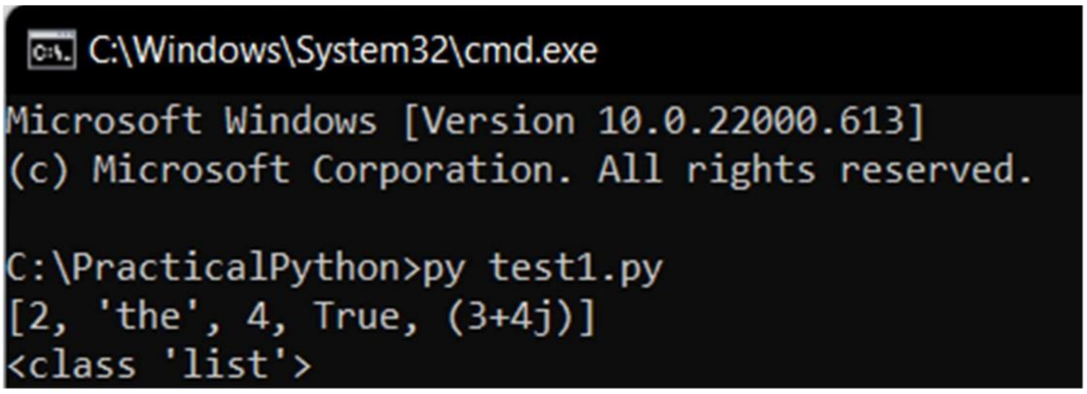
```
C:\Users\HP\OneDrive\Documents\Python>py Deepak.py
(1, 3, 5, 7, 'Ram')
<class 'tuple'>
```

8) **List (list): -**

Input: -

```
L = [2,’the’,4,True,3+4j]
print(L)
print(type(L))
```

Output:-



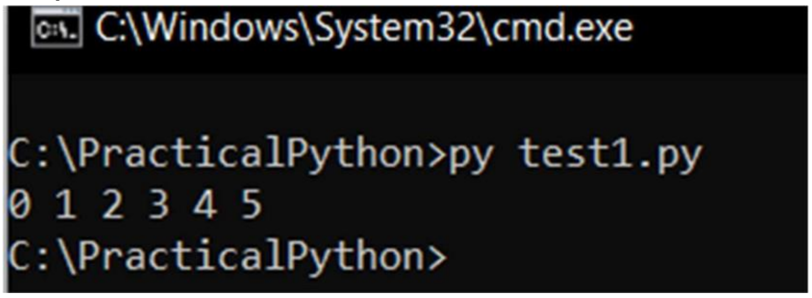
```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22000.613]
(c) Microsoft Corporation. All rights reserved.

C:\PracticalPython>py test1.py
[2, 'the', 4, True, (3+4j)]
<class 'list'>
```

9) **Range (range): -**

Input: -

```
x = range(6)
for n in x:
     print(n,end=” ”)
```

Output: -



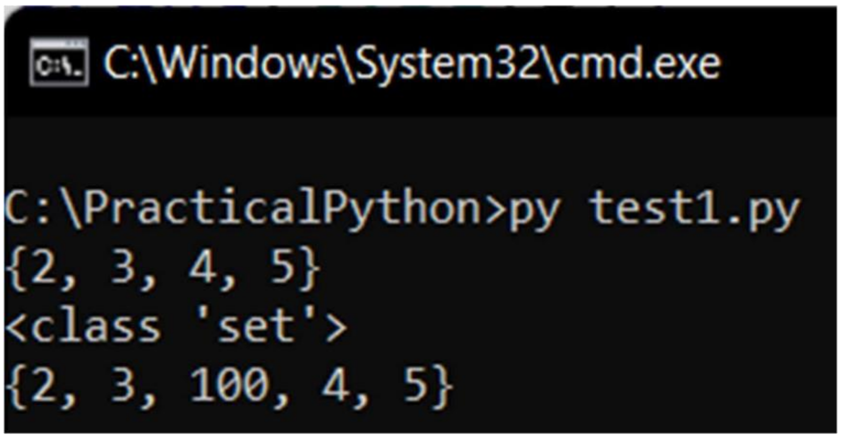
```
C:\Windows\System32\cmd.exe

C:\PracticalPython>py test1.py
0 1 2 3 4 5
C:\PracticalPython>
```

10) **Set(set): -**

Input: -

```
s = {2,3,4,5,5,5,4,3,2}
print(s)
print(type(s))
s.add(100)
print(s)
```

Output: -



C:\Windows\System32\cmd.exe

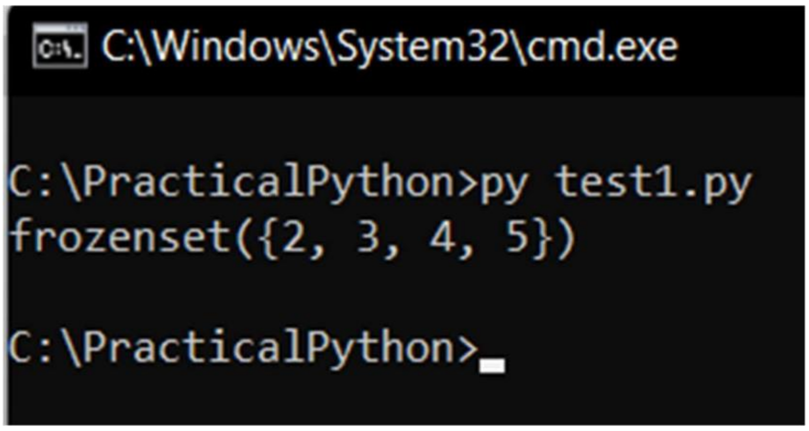
```
C:\PracticalPython>py test1.py
{2, 3, 4, 5}
<class 'set'>
{2, 3, 100, 4, 5}
```

11) **Frozen Set (frozenset): -**

Input:-

```
s = {2,3,4,5}
fs = frozenset(s)
print(fs)
```

Output: -



C:\Windows\System32\cmd.exe

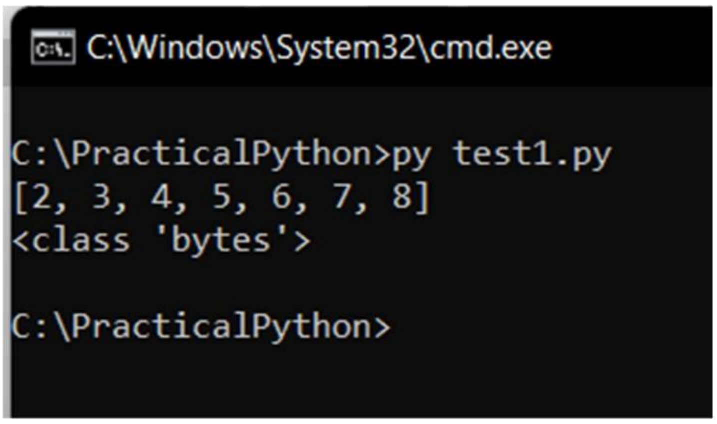
```
C:\PracticalPython>py test1.py
frozenset({2, 3, 4, 5})

C:\PracticalPython>_
```

12) **Bytes:-**

Input : -

```
l=[2,3,4,5,6,7,8]
b=bytes(l)
print(l)
print(type(b))
```

Output:-



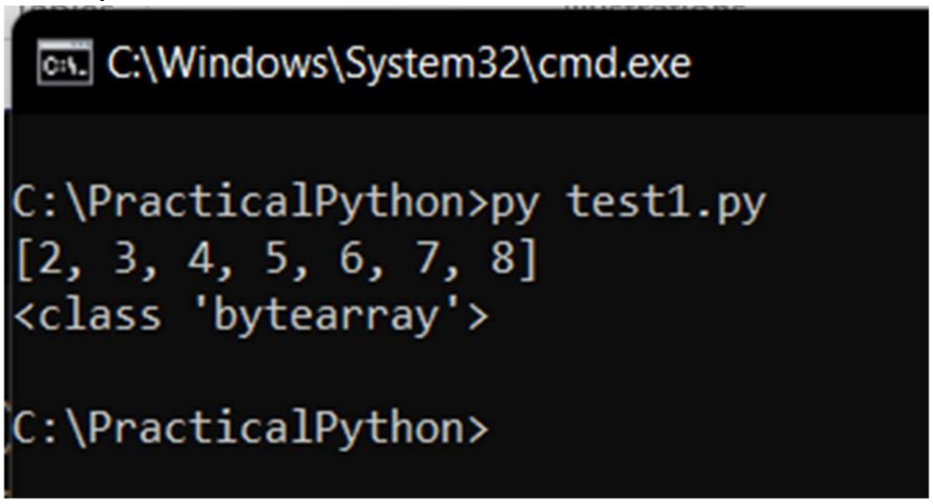
```
C:\Windows\System32\cmd.exe

C:\PracticalPython>py test1.py
[2, 3, 4, 5, 6, 7, 8]
<class 'bytes'>

C:\PracticalPython>
```

13)Bytesarray:-

Input :-

```
l=[2,3,4,5,6,7,8]
ba=bytearray(l)
print(l)
print(type(ba))
```

Output:-



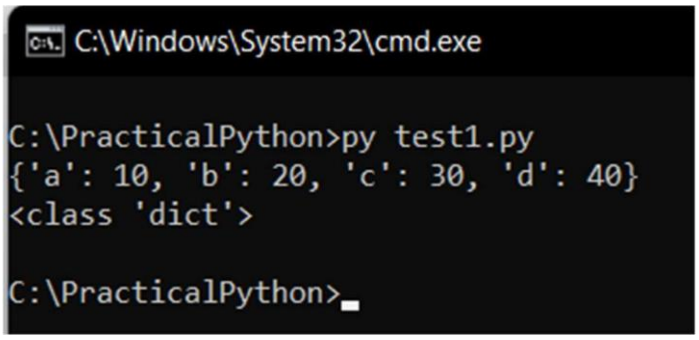
```
C:\Windows\System32\cmd.exe

C:\PracticalPython>py test1.py
[2, 3, 4, 5, 6, 7, 8]
<class 'bytearray'>

C:\PracticalPython>
```

14)Dictionary:-

Input:-

```
d={'a':10,'b':20,'c':30,'d':40}
print(d)
print(type(d))
```

Output:-



```
C:\Windows\System32\cmd.exe

C:\PracticalPython>py test1.py
{'a': 10, 'b': 20, 'c': 30, 'd': 40}
<class 'dict'>

C:\PracticalPython>
```

Practical No.:- 3

Name of the Practical:-WAP to Evaluate Different Arithmetic Operations Using Operators

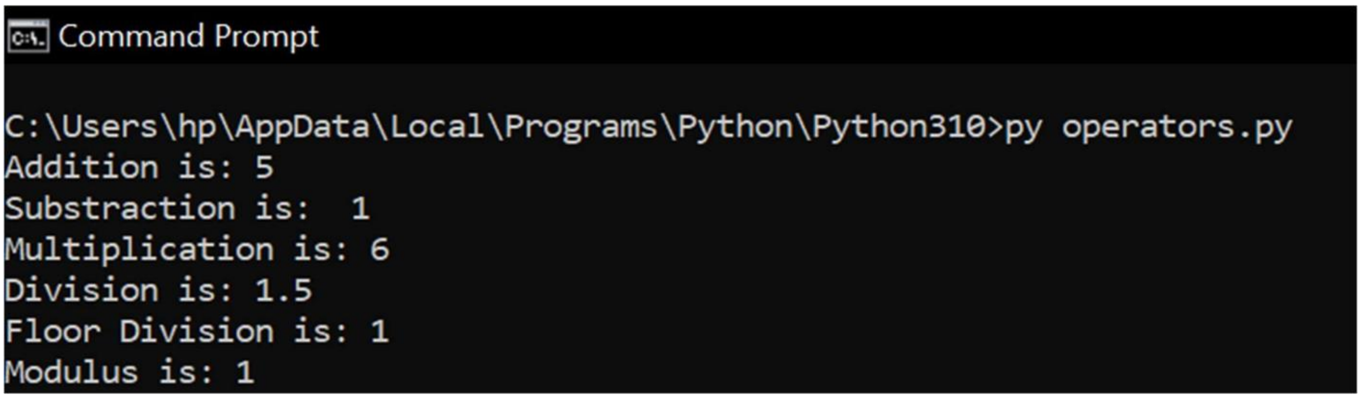
Software Required:- Python 3.10, Edit Plus

Syntax :-
```
val1+val2
val1-val2
val1*val2
val1/val2
val1//val2
val1%val2
val1**val2
```

Program :-
```
val1=3
val2=2
#using the addition operator
Add=val1+val2
print('Addition is:',Add)
#using the substraction operator
Sub=val1-val2
print('Substraction is: ',Sub)
#using the multiplication operator
Mul=val1*val2
print('Multiplication is:',Mul)
#using the division operator
Div=val1/val2
print('Division is:',Div)
#using the floor division operator
Fdiv=val1//val2
print('Floor Division is:',Fdiv)
#using the modulus operator
Mod=val1%val2
print('Modulus is:',Mod)
#using the exponentiation operator
```

```
Exp=val1**val2

print('Exponent is:',Exp)
```

Output:-



Command Prompt

```
C:\Users\hp\AppData\Local\Programs\Python\Python310>py operators.py
Addition is: 5
Substraction is:  1
Multiplication is: 6
Division is: 1.5
Floor Division is: 1
Modulus is: 1
```

Practical No.:- 4

Name of the Practical:-WAP to Find Factorial of Given Number using Control Flow Statement

Software Required:-Python 3.10, Edit Plus

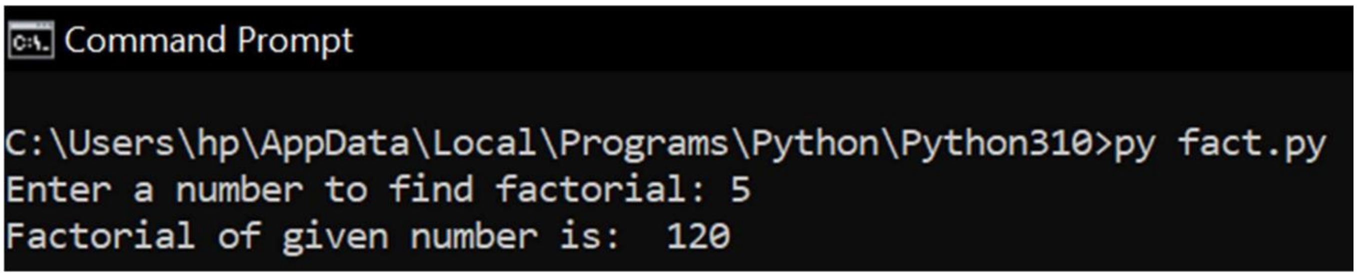
Syntax :-

```
for iterator_var in sequence:
    statements
        OR
while expression:
    statements
```

Program:-

```
n=int(input('Enter a number to find factorial: '))
factorial=1
while n>0:
        factorial=factorial*num
        n=n-1
print('Factorial of given number is: ',factorial)
                              OR
n=int(input('Enter a number to find factorial: '))
factorial=1
for i in range(1,num+1):
        factorial=factorial*num
        num=num-1
print('Factorial of given number is: ',factorial)
```

Output:



```
C:\Users\hp\AppData\Local\Programs\Python\Python310>py fact.py
Enter a number to find factorial: 5
Factorial of given number is:  120
```

Practical No.:- 5

Name of the Practical:-WAP to Design Function to Find Max and Min of two, three numbers

Software Required:-Python 3.10, Edit Plus

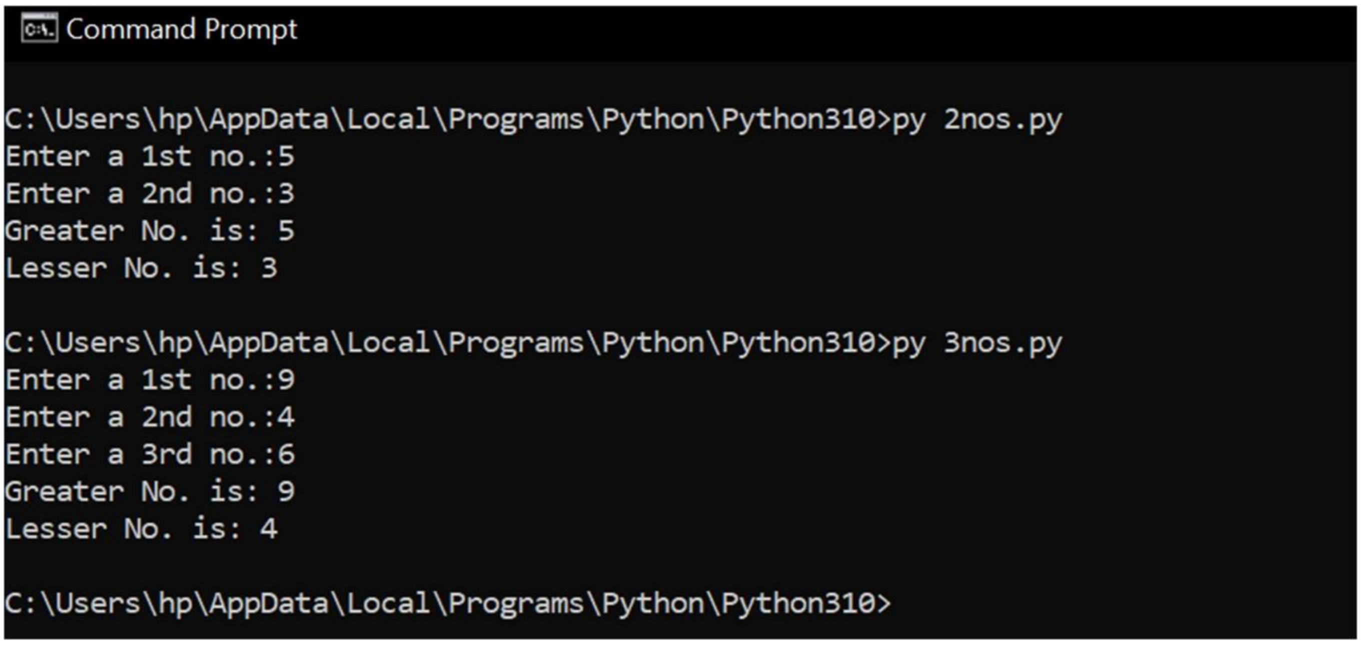
Syntax :-def function_name(parameters):

```
        Statements
```

Program:- #for two numbers

```
def max(a,b):
   m=a   if   a>b   else   b
   print('Greater No. is:',m)
def min(a,b):
   m=a   if   a<b   else   b
   print('Lesser No. is:',m)
n1=int(input('Enter a 1st no.:'))
n2=int(input('Enter a 2nd no.:'))
max(n1,n2)
min(n1,n2)
 #for three numbers
def max(a,b,c):
   m=a if a>b and a>c else b if b>c else c
   print('Greater No. is:',m)
def min(a,b,c):
   m=a if a<b and a<c else b if b<c else c
   print('Lesser No. is:',m)
n1=int(input('Enter a 1st no.:'))
n2=int(input('Enter a 2nd no.:'))
n3=int(input('Enter a 3rd no.:'))
max(n1,n2,n3)
min(n1,n2,n3)
```

Output:-



Command Prompt

```
C:\Users\hp\AppData\Local\Programs\Python\Python310>py 2nos.py
Enter a 1st no.:5
Enter a 2nd no.:3
Greater No. is: 5
Lesser No. is: 3

C:\Users\hp\AppData\Local\Programs\Python\Python310>py 3nos.py
Enter a 1st no.:9
Enter a 2nd no.:4
Enter a 3rd no.:6
Greater No. is: 9
Lesser No. is: 4

C:\Users\hp\AppData\Local\Programs\Python\Python310>
```

Practical No.:- 6

Name of the Practical:-WAP to Find Power of Given Numbers by Lambda Expression.

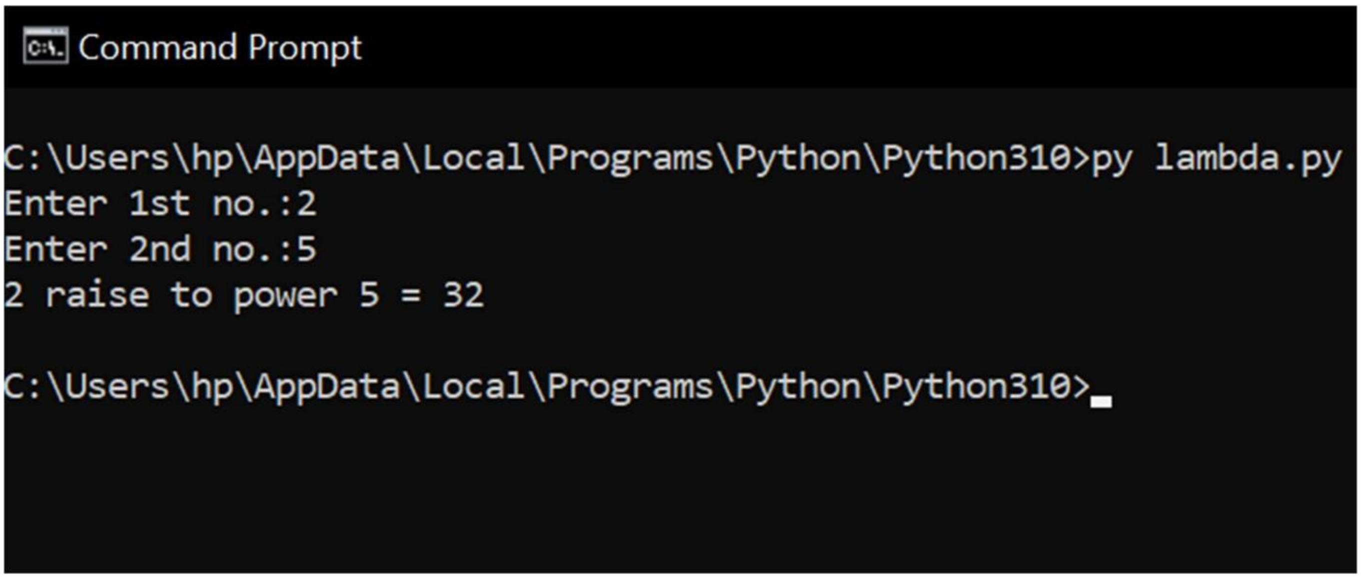
Software Required:-Python 3.10, Edit Plus

Syntax :-lambda arguments:expression

Program:-

```
p=lambda x,y: x**y
x=int(input('Enter 1st no.:'))
y=int(input('Enter 2nd no.:'))
print(x,'raise to power',y,'=',p(x,y))
```

Output:-



```
C:\Users\hp\AppData\Local\Programs\Python\Python310>py lambda.py
Enter 1st no.:2
Enter 2nd no.:5
2 raise to power 5 = 32

C:\Users\hp\AppData\Local\Programs\Python\Python310>
```

Practical No.:- 7

Name of the Practical:-WAP to Create Class and Objectives for various Arithmetic Operations.

Software Required:-Python 3.10, Edit Plus

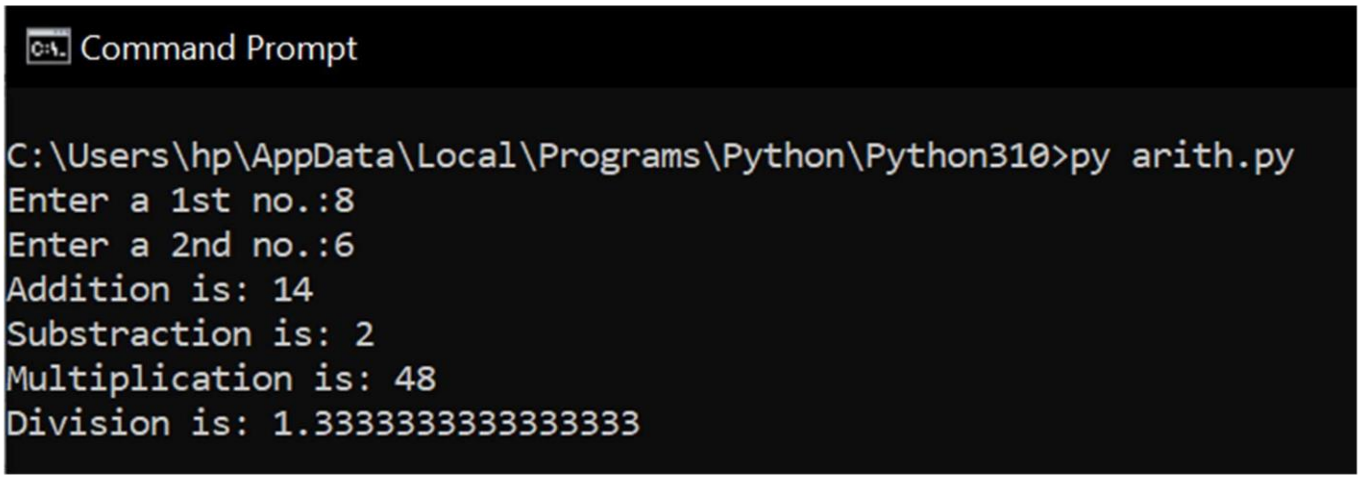
Syntax :- class ClassName:-

```
    Statements
```

Program:-class Arith:

```
    def __init_(self,n1,n2):
        self.n1=n1
        self.n2=n2
    def add(self):
       print('Addition is:',self.n1+self.n2)
    def sub(self):
       print('Substraction is:',self.n1-self.n2)
    def mul(self):
       print('Multiplication is:',self.n1*self.n2)
    def div(self):
       print('Division is:',self.n1/self.n2)
n1=int(input('Enter a 1st no.:'))
n2=int(input('Enter a 2nd no.:'))
a=Arith(n1,n2)
a.add()
a.sub()
a.mul()
a.div()
```

Output:-



```
C:\Users\hp\AppData\Local\Programs\Python\Python310>py arith.py
Enter a 1st no.:8
Enter a 2nd no.:6
Addition is: 14
Substraction is: 2
Multiplication is: 48
Division is: 1.3333333333333333
```

Practical No.: 8

Name of the Practical: W.A.P. to perform CRUD operations with MySQL Database.

Software Required: Python 3.10.2, Edit Plus, Command Prompt.

Syntax: show databases;

C- Create Database (create database (name);)

R- Read Database (display table;)

U- Update Database

D- Delete Database (drop database (name);) (desc ;)

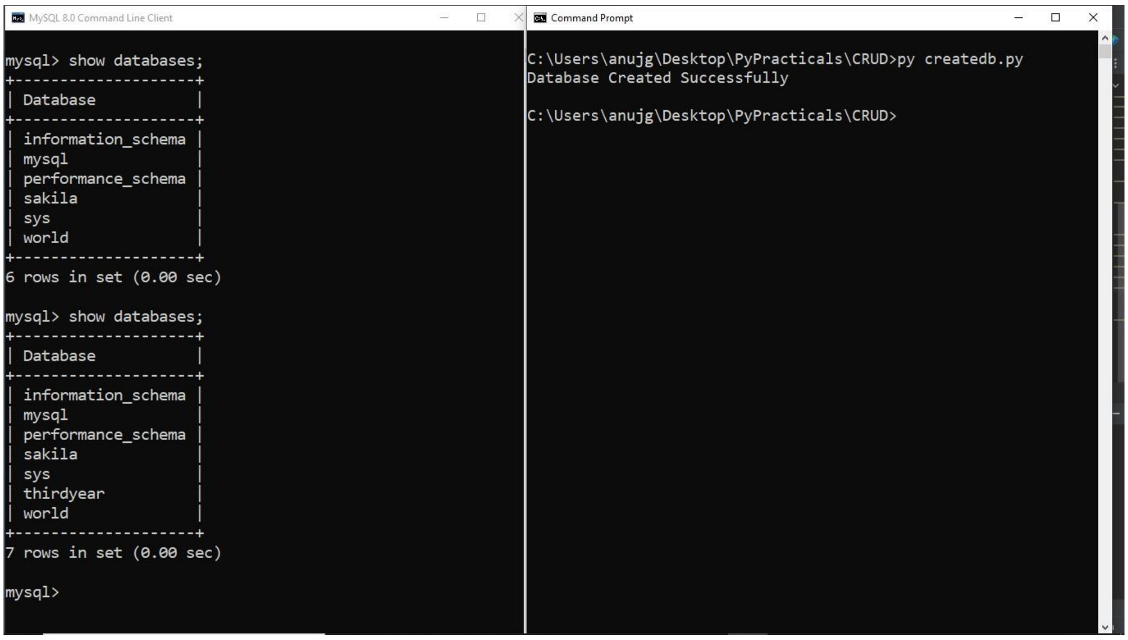
Program:

A) CRUD operations with MySQL

1) Create database:

```
#show databases;
#create database thirdyear;
#drop database thirdyear;
#use thirdyear;
#show tables;
#desc student;
#SELECT * FROM student;

#CREATE DATABASE

#WAP to create table in mysql database: thridyear
try:
      import mysql.connector #Importing Connectorpackage
      mysqldb=mysql.connector.connect(host="localhost",port=3306,user="root",
      password="root")#established connection
      mycursor=mysqldb.cursor()#cursor() method createa cursor object
      mycursor.execute("create database thirdyear")#Execute SQL Query to
      create a database
      mysqldb.close()#Connection Close
except:
        print('Database Not Created')
finally:
         print('Database Created Successfully')
```

Output:


MySQL 8.0 Command Line Client

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sakila             |
| sys                |
| world              |
+--------------------+
6 rows in set (0.00 sec)

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sakila             |
| sys                |
| thirdyear          |
| world              |
+--------------------+
7 rows in set (0.00 sec)

mysql>
```

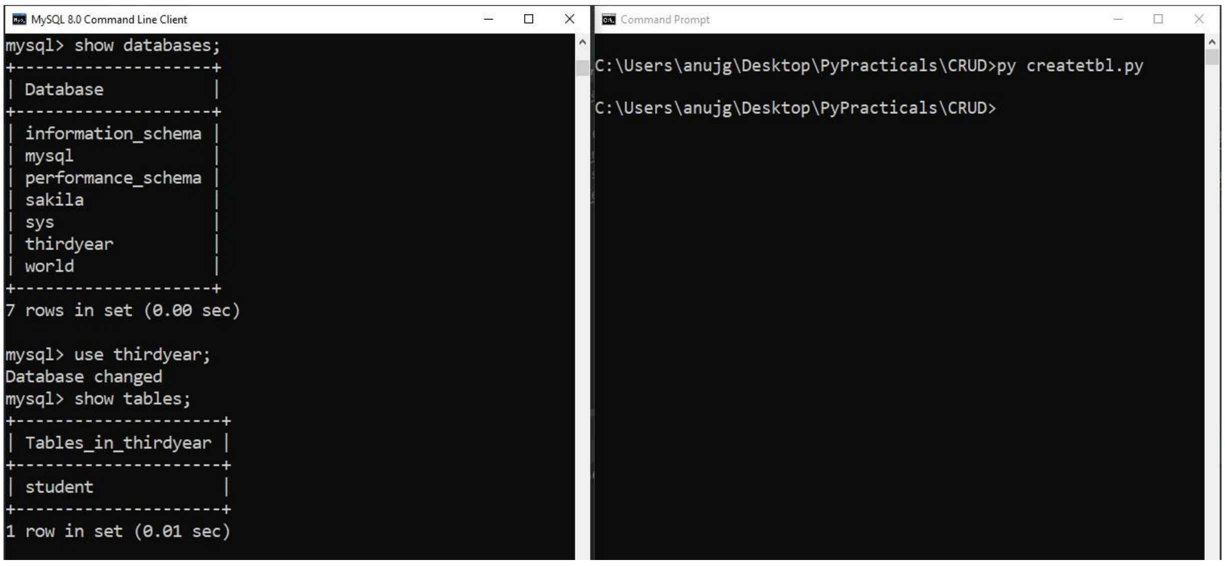
Command Prompt

```
C:\Users\anujg\Desktop\PyPracticals\CRUD>py createdb.py
Database Created Successfully

C:\Users\anujg\Desktop\PyPracticals\CRUD>
```

2) Create Table:

```
#Create a table into dbpython database

import mysql.connector
mysqldb=mysql.connector.connect(host="localhost",user="root",
password="root",database="thirdyear")#established connection between your
database
mycursor=mysqldb.cursor()#cursor() method create a cursor object
mycursor.execute("create table student(roll INT,nameVARCHAR(255), marks
INT)")#Execute SQL Query to create a table into your database
mysqldb.close()#Connection Close
```

Output:


MySQL 8.0 Command Line Client

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sakila             |
| sys                |
| thirdyear          |
| world              |
+--------------------+
7 rows in set (0.00 sec)

mysql> use thirdyear;
Database changed
mysql> show tables;
+---------------------+
| Tables_in_thirdyear |
+---------------------+
| student             |
+---------------------+
1 row in set (0.01 sec)
```

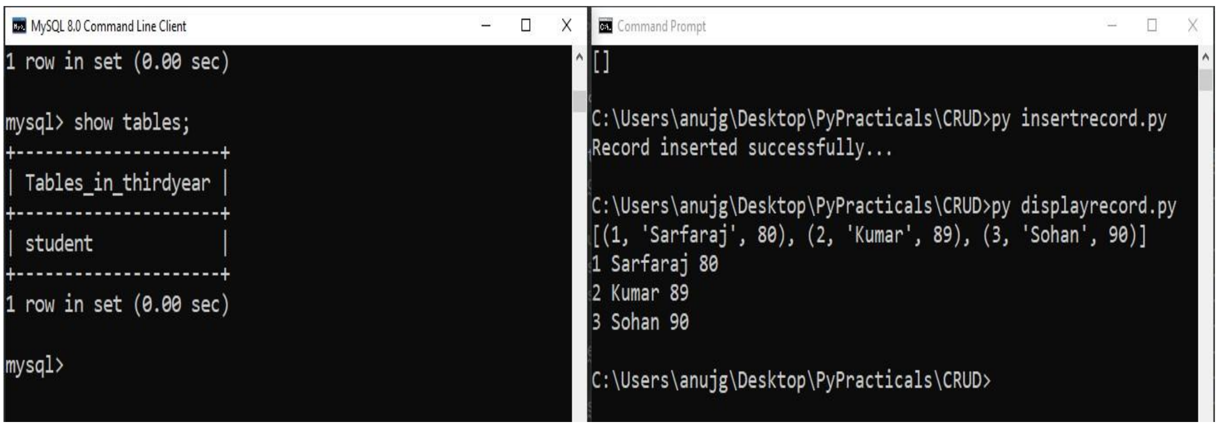
Command Prompt

```
C:\Users\anujg\Desktop\PyPracticals\CRUD>py createtbl.py

C:\Users\anujg\Desktop\PyPracticals\CRUD>
```

3) Insert Record:

```
import mysql.connector

mysqldb=mysql.connector.connect(host="localhost",user="root",
password="root", database="thirdyear")#established connection between your
database
mycursor=mysqldb.cursor()#cursor() method create a cursor object
try:
    #Execute SQL Query to insert record mycursor.execute("insert into student
    values(1,'Sarfaraj',80),(2,'Kumar',89),(3,'Sohan',90)")
    mysqldb.commit() # Commit is used for yourchanges in the
    database
     print('Record inserted successfully...')
except:
    # rollback used for if any errormysqldb.rollback()
mysqldb.close()#Connection Close
```

Output:



```
1 row in set (0.00 sec)

mysql> show tables;
+--------------------+
| Tables_in_thirdyear |
+--------------------+
| student            |
+--------------------+
1 row in set (0.00 sec)

mysql>
```

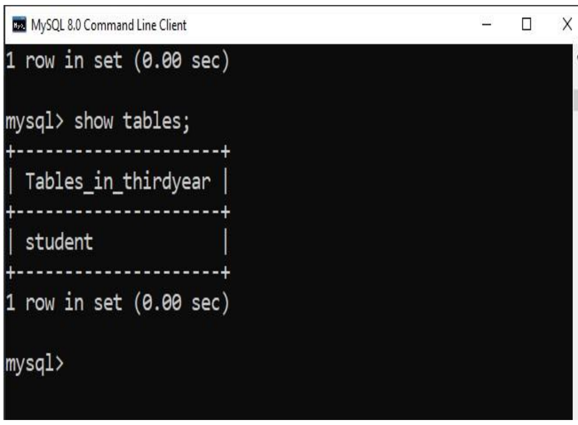
```
[]

C:\Users\anujg\Desktop\PyPracticals\CRUD>py insertrecord.py
Record inserted successfully...

C:\Users\anujg\Desktop\PyPracticals\CRUD>py displayrecord.py
[(1, 'Sarfaraj', 80), (2, 'Kumar', 89), (3, 'Sohan', 90)]
1 Sarfaraj 80
2 Kumar 89
3 Sohan 90

C:\Users\anujg\Desktop\PyPracticals\CRUD>
```

4) Display Record:

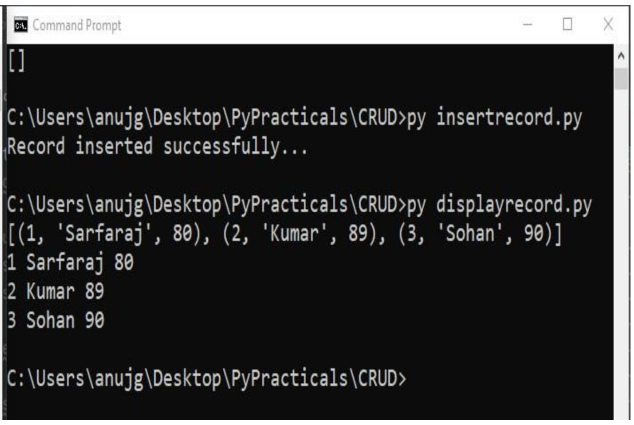
```
import mysql.connector

 mysqldb=mysql.connector.connect(host="localhost",user="root",
password="root", database="thirdyear")#established connection between your
database
mycursor=mysqldb.cursor()#cursor() method create a cursor object
try:
    mycursor.execute("select * from student")#ExecuteSQL Query to select all
    record
    result=mycursor.fetchall() #fetches all the rowsin a result set
    print(result) for i in result:
    roll=i[0] name=i[1]
    marks=i[2]
```

```
        print(roll,name,marks)
    except:
        print('Error:Unable to fetch data.')
    mysqldb.close()#Connection Close
```

Output:



```
1 row in set (0.00 sec)

mysql> show tables;
+--------------------+
| Tables_in_thirdyear |
+--------------------+
| student            |
+--------------------+
1 row in set (0.00 sec)

mysql>
```

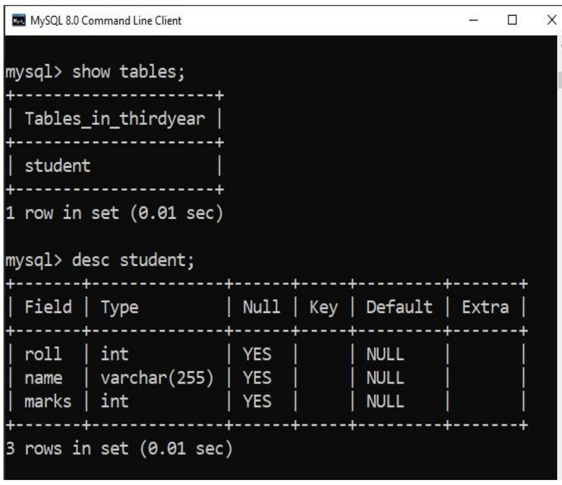


```
[]

C:\Users\anujg\Desktop\PyPracticals\CRUD>py insertrecord.py
Record inserted successfully...

C:\Users\anujg\Desktop\PyPracticals\CRUD>py displayrecord.py
[(1, 'Sarfaraj', 80), (2, 'Kumar', 89), (3, 'Sohan', 90)]
1 Sarfaraj 80
2 Kumar 89
3 Sohan 90

C:\Users\anujg\Desktop\PyPracticals\CRUD>
```

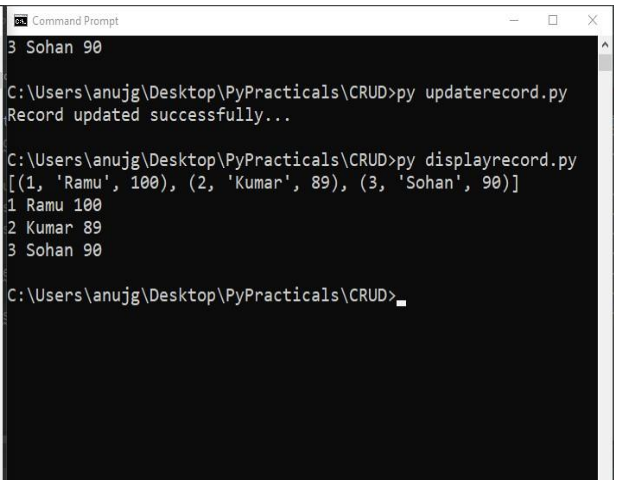
5) Update Record:

```
    import mysql.connector

    mysqldb=mysql.connector.connect(host="localhost",user="root",
    password="root",database="thirdyear")#established connection between your
    database
    mycursor=mysqldb.cursor()#cursor() method create a cursor object
    try:
        mycursor.execute("UPDATE student SET name='Ramu',marks=100 WHERE
         roll=1")#Execute SQL Query to updaterecord
        mysqldb.commit() # Commit is used for yourchanges in the
        database
        print('Record updated successfully...')
    except:
      # rollback used for if any errormysqldb.rollback()
    mysqldb.close()#Connection Close
```

Output:



```
mysql> show tables;
+--------------------+
| Tables_in_thirdyear |
+--------------------+
| student            |
+--------------------+
1 row in set (0.01 sec)

mysql> desc student;
+-------+--------------+------+-----+---------+-------+
| Field | Type         | Null | Key | Default | Extra |
+-------+--------------+------+-----+---------+-------+
| roll  | int          | YES  |     | NULL    |       |
| name  | varchar(255) | YES  |     | NULL    |       |
| marks | int          | YES  |     | NULL    |       |
+-------+--------------+------+-----+---------+-------+
3 rows in set (0.01 sec)
```

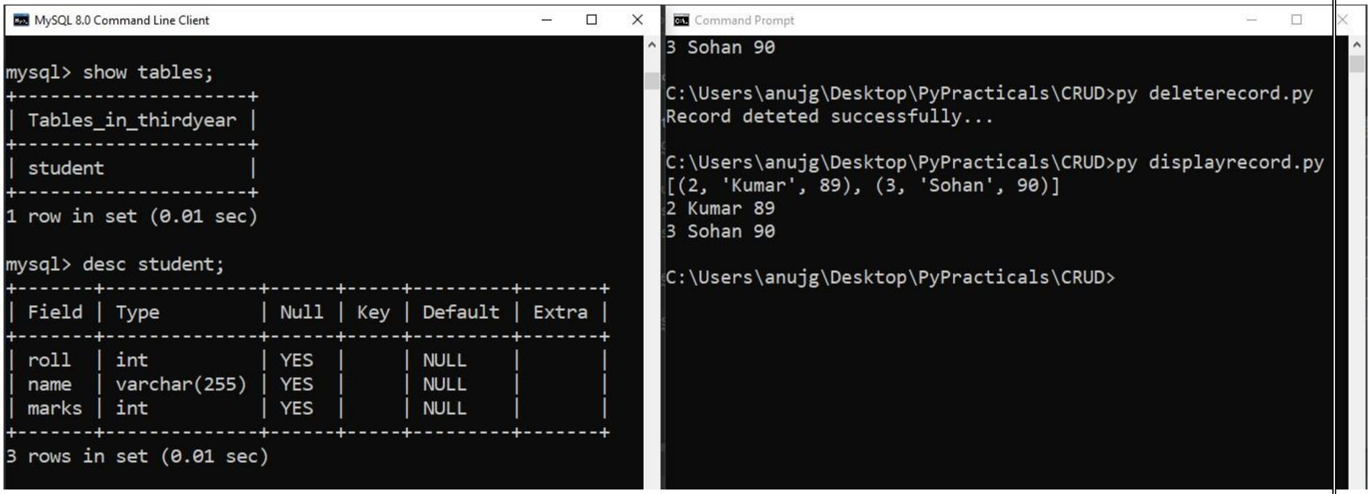


```
3 Sohan 90

C:\Users\anujg\Desktop\PyPracticals\CRUD>py updaterecord.py
Record updated successfully...

C:\Users\anujg\Desktop\PyPracticals\CRUD>py displayrecord.py
[(1, 'Ramu', 100), (2, 'Kumar', 89), (3, 'Sohan', 90)]
1 Ramu 100
2 Kumar 89
3 Sohan 90

C:\Users\anujg\Desktop\PyPracticals\CRUD>
```

6) Delete Record:

```
import mysql.connector

 mysqldb=mysql.connector.connect(host="localhost",user="root",
password="root", database="thirdyear")#established connection between your
database
mycursor=mysqldb.cursor()#cursor() method create a cursor object
try:
        mycursor.execute("DELETE FROM student WHEREroll=1")#Execute
        SQL Query to detete a record
        mysqldb.commit() # Commit is used for yourchanges in the
database
        print('Record deteted successfully...')
except:
     # rollback used for if any errormysqldb.rollback()
mysqldb.close()#Connection Close
```

Output:



MySQL 8.0 Command Line Client

```
mysql> show tables;
+---------------------+
| Tables_in_thirdyear |
+---------------------+
| student             |
+---------------------+
1 row in set (0.01 sec)

mysql> desc student;
+-------+--------------+------+-----+---------+-------+
| Field | Type         | Null | Key | Default | Extra |
+-------+--------------+------+-----+---------+-------+
| roll  | int          | YES  |     | NULL    |       |
| name  | varchar(255) | YES  |     | NULL    |       |
| marks | int          | YES  |     | NULL    |       |
+-------+--------------+------+-----+---------+-------+
3 rows in set (0.01 sec)
```

Command Prompt

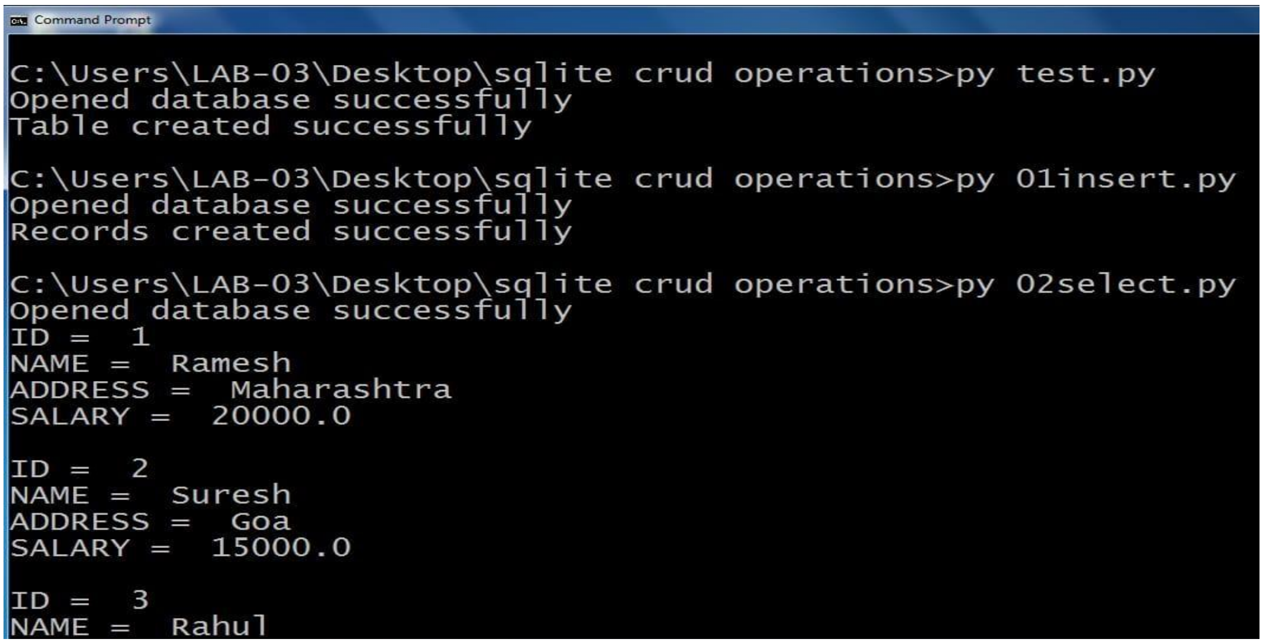
```
3 Sohan 90

C:\Users\anujg\Desktop\PyPracticals\CRUD>py deleterecord.py
Record deteted successfully...

C:\Users\anujg\Desktop\PyPracticals\CRUD>py displayrecord.py
[(2, 'Kumar', 89), (3, 'Sohan', 90)]
2 Kumar 89
3 Sohan 90

C:\Users\anujg\Desktop\PyPracticals\CRUD>
```

B) <u>CRUD operations using SQLite</u>

1) Create Database:

```
import sqlite3

conn = sqlite3.connect('test2.db') print("Opened database

successfully")

conn.execute('''CREATE TABLE COMPANY
(ID INT PRIMARY KEY                         NOT NULL,
NAME                              TEXT      NOT NULL,
AGE                               INT       NOT NULL,
ADDRESS                           CHAR(50),
SALARY                            REAL);''')
print("Table created successfully")

conn.close()
```

Output:

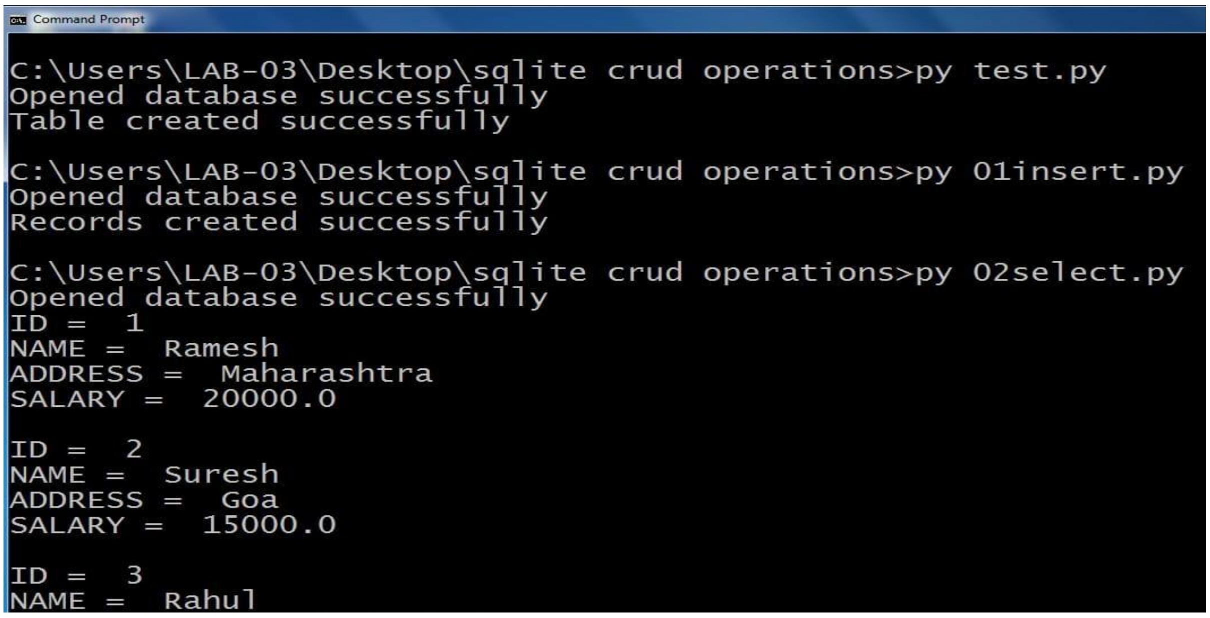


```
C:\Users\LAB-03\Desktop\sqlite crud operations>py test.py
Opened database successfully
Table created successfully

C:\Users\LAB-03\Desktop\sqlite crud operations>py 01insert.py
Opened database successfully
Records created successfully

C:\Users\LAB-03\Desktop\sqlite crud operations>py 02select.py
Opened database successfully
ID =  1
NAME =  Ramesh
ADDRESS =  Maharashtra
SALARY =  20000.0

ID =  2
NAME =  Suresh
ADDRESS =  Goa
SALARY =  15000.0

ID =  3
NAME =  Rahul
```

2) Insert Record:

```
import sqlite3

conn = sqlite3.connect('test2.db') print("Opened database
successfully")

conn.execute("INSERT INTO COMPANY
(ID,NAME, AGE,ADDRESS,SALARY) \
VALUES (1, 'Ramesh', 32, 'Maharashtra',
20000.00 )");

conn.execute("INSERT INTO COMPANY
(ID,NAME,AGE,ADDRESS,SALARY) \
VALUES (2, 'Suresh', 25, 'Goa', 15000.00 )");

conn.execute("INSERT INTO COMPANY
(ID,NAME,AGE,ADDRESS,SALARY) \
VALUES (3, 'Rahul', 23, 'MP', 20000.00 )");

conn.execute("INSERT INTO COMPANY
(ID,NAME,AGE,ADDRESS,SALARY)\
VALUES (4, 'Sachin', 25, 'Gujrat ', 65000.00)");

conn.commit()
print("Records created successfully")conn.close()
```

Output:

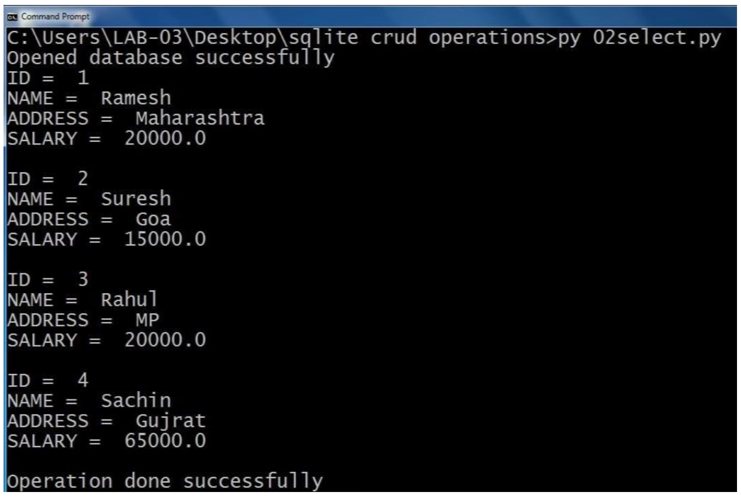


```
Command Prompt

C:\Users\LAB-03\Desktop\sqlite crud operations>py test.py
Opened database successfully
Table created successfully

C:\Users\LAB-03\Desktop\sqlite crud operations>py 01insert.py
Opened database successfully
Records created successfully

C:\Users\LAB-03\Desktop\sqlite crud operations>py 02select.py
Opened database successfully
ID =  1
NAME =  Ramesh
ADDRESS =  Maharashtra
SALARY =  20000.0

ID =  2
NAME =  Suresh
ADDRESS =  Goa
SALARY =  15000.0

ID =  3
NAME =  Rahul
```

3) Select Record:

```
import sqlite3

conn = sqlite3.connect('test2.db') print("Opened database
successfully")

cursor = conn.execute("SELECT id, name, address,salary from COMPANY")
for row in cursor: print("ID = ", row[0])
print("NAME = ", row[1]) print("ADDRESS = ", row[2])
print("SALARY = ", row[3], "\n")

print("Operation done successfully")conn.close()
```

Output:

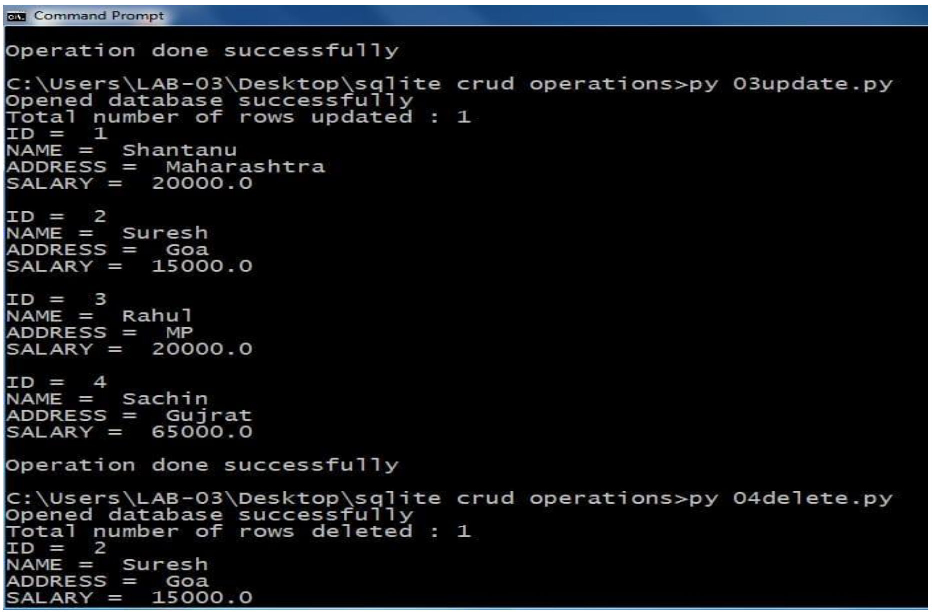


```
Command Prompt
C:\Users\LAB-03\Desktop\sqlite crud operations>py 02select.py
Opened database successfully
ID =  1
NAME =  Ramesh
ADDRESS =  Maharashtra
SALARY =  20000.0

ID =  2
NAME =  Suresh
ADDRESS =  Goa
SALARY =  15000.0

ID =  3
NAME =  Rahul
ADDRESS =  MP
SALARY =  20000.0

ID =  4
NAME =  Sachin
ADDRESS =  Gujrat
SALARY =  65000.0

Operation done successfully
```

4) Update Record:

```
import sqlite3

conn = sqlite3.connect('test2.db') print("Opened database
successfully")

conn.execute("UPDATE COMPANY set NAME = 67000.00where ID = 1")
conn.commit()
print("Total number of rows updated :",conn.total_changes)

cursor = conn.execute("SELECT id, name, address,salary from COMPANY")
for row in cursor: print("ID = ", row[0])
print("NAME = ", row[1]) print("ADDRESS = ", row[2])
print("SALARY = ", row[3], "\n")

print("Operation done successfully")conn.close()
```

Output:

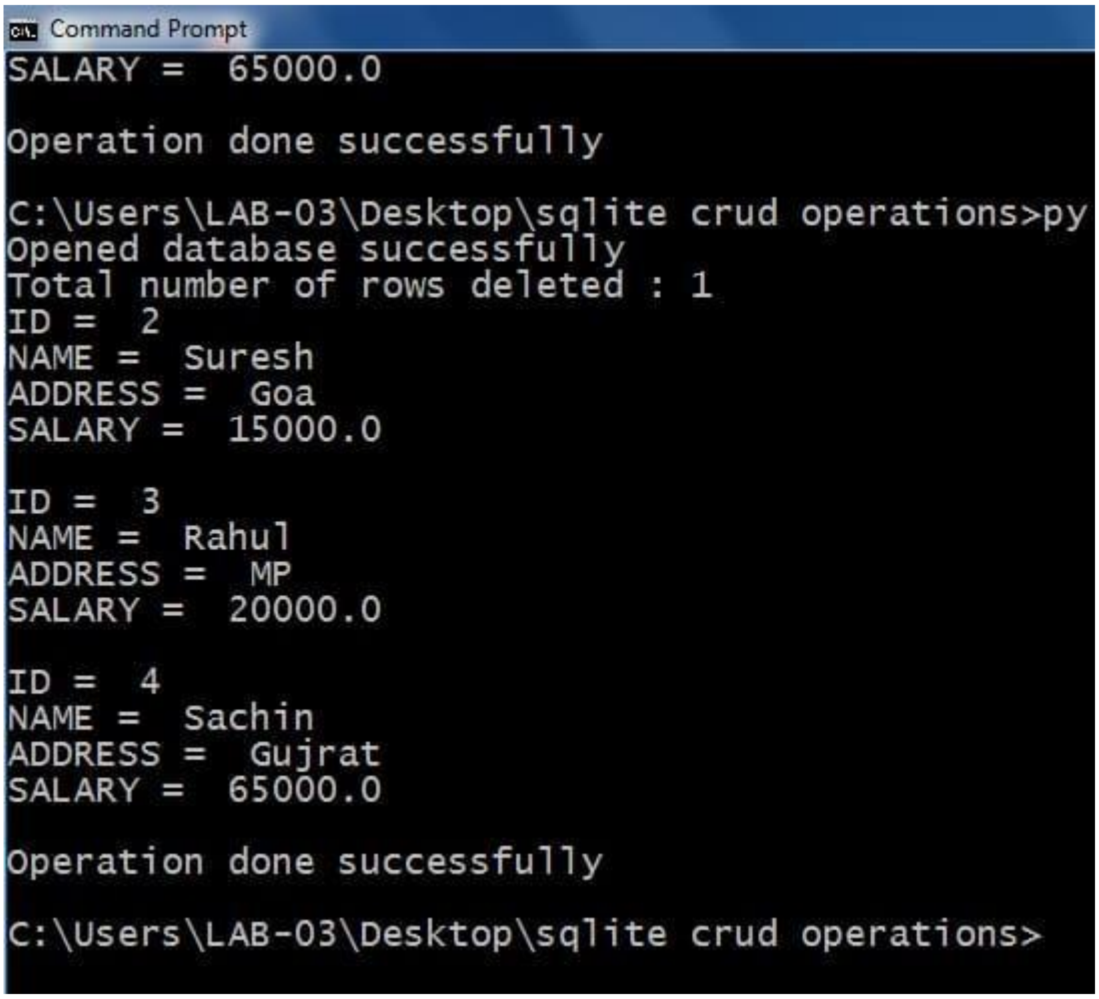


```
Operation done successfully

C:\Users\LAB-03\Desktop\sqlite crud operations>py 03update.py
Opened database successfully
Total number of rows updated : 1
ID =  1
NAME =  Shantanu
ADDRESS =  Maharashtra
SALARY =  20000.0

ID =  2
NAME =  Suresh
ADDRESS =  Goa
SALARY =  15000.0

ID =  3
NAME =  Rahul
ADDRESS =  MP
SALARY =  20000.0

ID =  4
NAME =  Sachin
ADDRESS =  Gujrat
SALARY =  65000.0

Operation done successfully

C:\Users\LAB-03\Desktop\sqlite crud operations>py 04delete.py
Opened database successfully
Total number of rows deleted : 1
ID =  2
NAME =  Suresh
ADDRESS =  Goa
SALARY =  15000.0
```

5) Delete Record:

```
import sqlite3

conn = sqlite3.connect('test2.db') print("Opened database
successfully");

conn.execute("DELETE from COMPANY where ID = 1;")
conn.commit()
print("Total number of rows deleted :",conn.total_changes)

cursor = conn.execute("SELECT id, name, address,salary from COMPANY")
for row in cursor: print("ID = ", row[0])
print("NAME = ", row[1]) print("ADDRESS = ", row[2]) print("SALARY = ",
row[3], "\n")

print("Operation done successfully")conn.close()
```

Output:



```
SALARY =  65000.0

Operation done successfully

C:\Users\LAB-03\Desktop\sqlite crud operations>py
Opened database successfully
Total number of rows deleted : 1
ID =  2
NAME =  Suresh
ADDRESS =  Goa
SALARY =  15000.0

ID =  3
NAME =  Rahul
ADDRESS =  MP
SALARY =  20000.0

ID =  4
NAME =  Sachin
ADDRESS =  Gujrat
SALARY =  65000.0

Operation done successfully

C:\Users\LAB-03\Desktop\sqlite crud operations>
```

Practical No.:- 9

Name of the Practical:-WAP to Understand Python List Comprehension with suitable example.

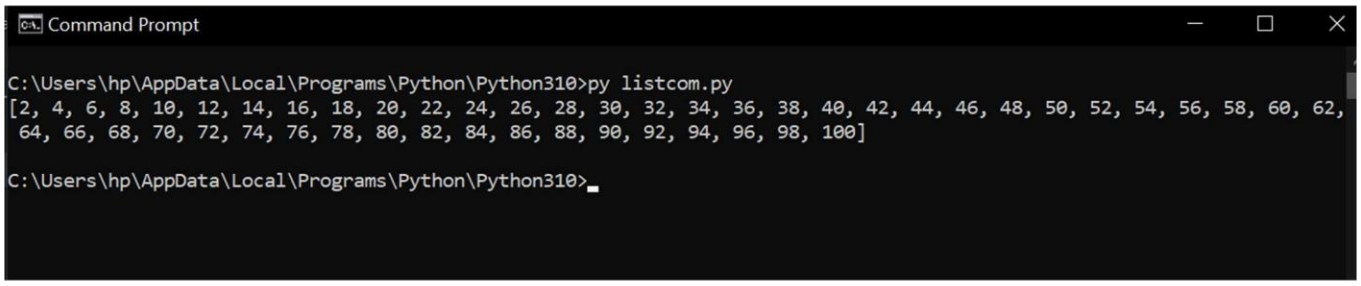
Software Required:-Python 3.10, Edit Plus

Syntax :-list=[element expression for element if condition]

Program:-#Creating list of even no.from 1 to 100 using list comprehensive

```
list=[x for x in range(0,101) if x%2==0]
print(list)
```

Output:-



```
C:\Users\hp\AppData\Local\Programs\Python\Python310>py listcom.py
[2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62,
 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100]

C:\Users\hp\AppData\Local\Programs\Python\Python310>
```

Practical No.: 10

Name of the Practical:-WAP to Demonstrate Inheritance concept with suitable example.

Software Required:-Python 3.10, Edit Plus

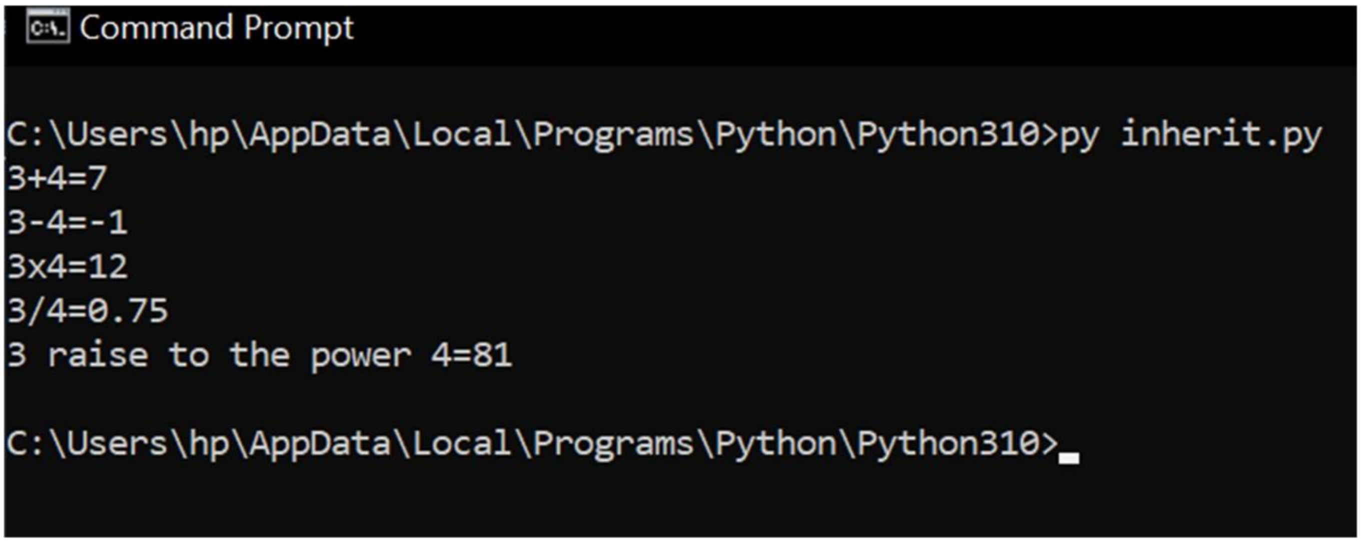
Syntax :-class a:

```
        Statements
      class b(a):
          Statements
```

Program:class Convension:

```
        def __init_(self,n1,n2):
              self.n1=n1
              self.n2=n2
          def add(self):
               print(f'{self.n1}+{self.n2}={self.n1+self.n2}')\
          def sub(self):
               print(f'{self.n1}-{self.n2}={self.n1-self.n2}')
          def mul(self):
               print(f'{self.n1}x{self.n2}={self.n1*self.n2}')
          def div(self):
               print(f'{self.n1}/{self.n2}={self.n1/self.n2}')
        class Scientific:
          def___init_(self,n1,n2):
              self.n1=n1
              self.n2=n2
            def pow(self):
               print(f'{self.n1} raise to the power {self.n2}={self.n1**self.n2}')
          s=Scienfic(3,4)
          s.add()
          s.sub()
          s.mul()
          s.div()
          s.pow()
```

Output:-



```
C:\Users\hp\AppData\Local\Programs\Python\Python310>py inherit.py
3+4=7
3-4=-1
3x4=12
3/4=0.75
3 raise to the power 4=81

C:\Users\hp\AppData\Local\Programs\Python\Python310>
```

Practical No.: 11

Name of the Practical:-WAP to Analyze various Exceptions.

Software Required:-Python 3.10, Edit Plus

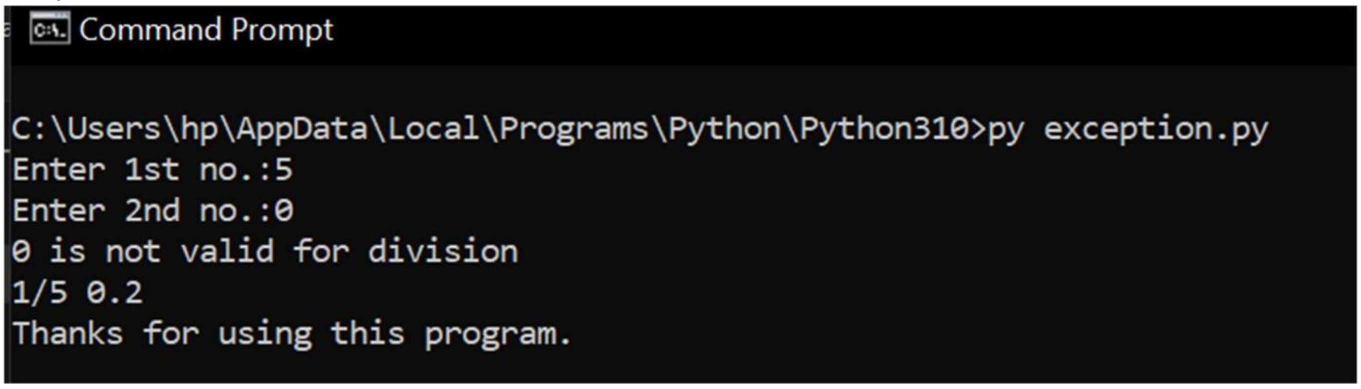
Syntax :-try:

```
try:
    Statements
except:
    Statements
```

Program:--#Exception Handling

```
try:
    n1=int(input('Enter 1st no.:'))
    n2=int(input('Enter 2nd no.:'))
    div=n1/n2
    print(f'{n1}/{n2}={div}')
except ZeroDivisionError:
    print(f'{n2} is not valid for division ')
finally:
    try:
        print(f'1/{n1}',1/n1)
    except ZeroDivisionError:
        print('Use valid no. for Inverse')
    finally:
        print('Thanks for using this program.')
```

Output:-



```
C:\Users\hp\AppData\Local\Programs\Python\Python310>py exception.py
Enter 1st no.:5
Enter 2nd no.:0
0 is not valid for division
1/5 0.2
Thanks for using this program.
```

Practical No.: 12

Name of the Practical:-WAP to Design Numeric value to Word Converter.

Software Required:-Python 3.10, Edit Plus

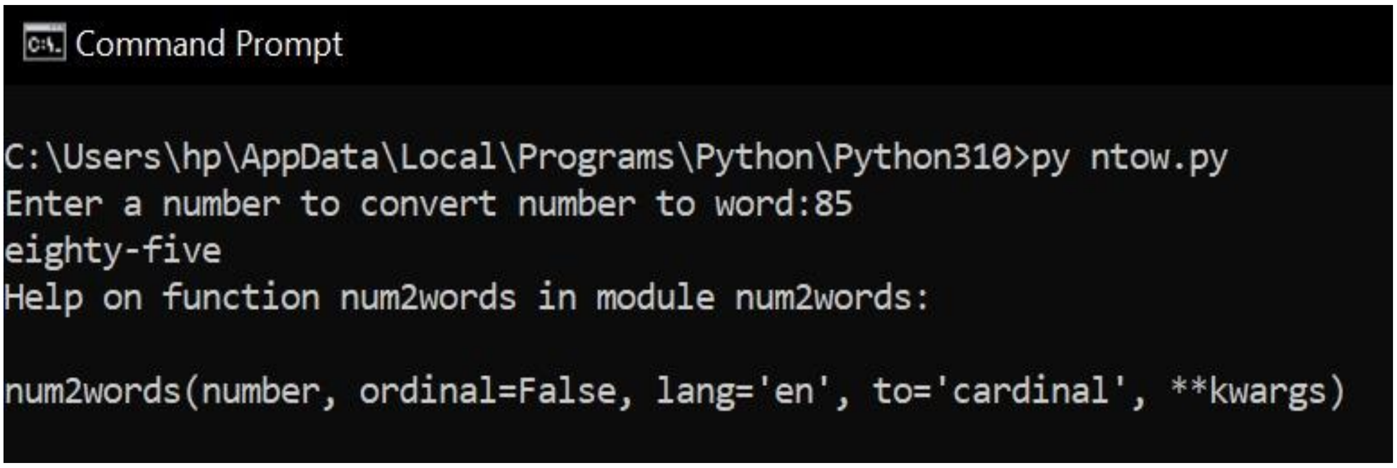
Syntax :-from num2words import num2words

```
Print(num2words(number))
```

Program: #word to numeric converter

```
from num2words import num2words
n=int(input('Enter a number to convert number to word:'))
print(num2words(n))

help(num2words)

dir(num2words)
```

Output:-



```
C:\Users\hp\AppData\Local\Programs\Python\Python310>py ntow.py
Enter a number to convert number to word:85
eighty-five
Help on function num2words in module num2words:

num2words(number, ordinal=False, lang='en', to='cardinal', **kwargs)
```