FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY (FISAT)™

HORMIS NAGAR, MOOKKANNOOR

ANGAMALY-683577

'FOCUS ON EXCELLENCE'

LABORATORY RECORD

20MCA131 - PROGRAMMING LAB

Name: FRANCIS B M

Branch: MASTER OF COMPUTER APPLICATIONS

Semester: 1 **Batch: 2021 A** **Roll No: 58**

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University Exam.Reg. No: FIT21MCA-2058

CERTIFICATE

Certified that this is the Bonafide record of the Practical work done by Mr. **FRANCIS B M (**FIT21MCA-2058) in the **20MCA131-PROGRAMMING** Laboratory of the Federal Institute of Science and Technology during the academic year 2021-2022.

Signature of Staff in Charge Signature of H.O.D
Name: Name:
Date:

Date of University practical examination ………………………

Signature of Signature of
Internal Examiner External Examiner

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8	09/12/2021	Accept a list of words and return length of longest word.		

9	**09/12/2021**	Construct following pattern using nested loop. *		
10	**09/12/2021**	Generate all factors of a number.		
		CO3		
1	**29/01/2022**	Create a package graphics with modules rectangle, circle and sub-package 3D-graphics with modules cuboid and sphere. Include methods to find area and perimeter of respective figures in each module. Write programs that finds area and perimeter of figures by different importing statements. (Include selective import of modules and import * statements)		
		CO4		
1	**13/01/2022**	Create Rectangle class with attributes length and breadth and methods to find area and perimeter. Compare two Rectangle objects by their area.		
2	**13/01/2022**	Create a Bank account with members account number, name, type of account and balance. Write constructor and methods to deposit at the bank and withdraw an amount from the bank.		
3	**13/01/2022**	Create a class Rectangle with private attributes length and width. Overload '<' operator to compare the area of 2 rectangles.		

4	**20/01/2022**	Create a class Time with private attributes hour, minute and second. Overload ‘+’ operator to find sum of 2 time		
5	**20/01/2022**	Create a class Publisher (name). Derive class Book from Publisher with attributes title and author. Derive class Python from Book with attributes price and no_of_pages. Write a program that displays information about a Python book. Use base class constructor invocation and method overriding.		
CO5				
1	**03/02/2022**	Write a Python program to read a file line by line and store it into a list.		
2	**03/02/2022**	Write a Python program to read each row from a given csv file and print a list of strings.		

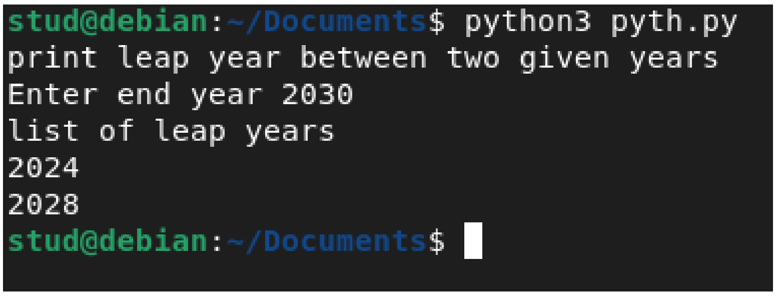
COURSE OUTCOME 1

1) Display future leap years from current year to a final year entered by User.

Source code

```
print("print leap year
between two given years");
startyear=2021
endyear=int(input("Enter end year")) print("list of leap years")
for year in
    range(startyear,endyear
    ): if(0==year%4):
          print(year)
```

Output



```
stud@debian:~/Documents$ python3 pyth.py
print leap year between two given years
Enter end year 2030
list of leap years
2024
2028
stud@debian:~/Documents$ 
```

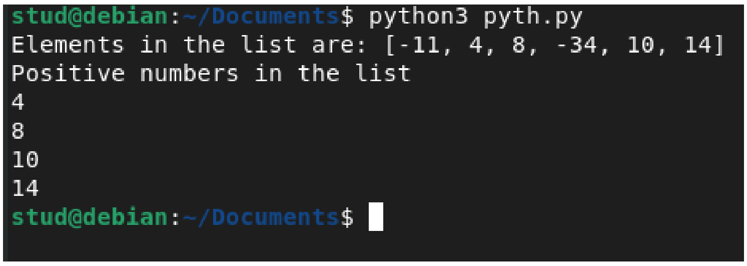
2) List comprehensions:

a. Generate positive list of numbers from a given list of integers.

Source code

```
list=[-11,4,8,-34,10,14]
print("Elements in the list are:",list) print("Positive numbers in the list")
for num in list:
    if num>=0:
          print(num)
```

Output



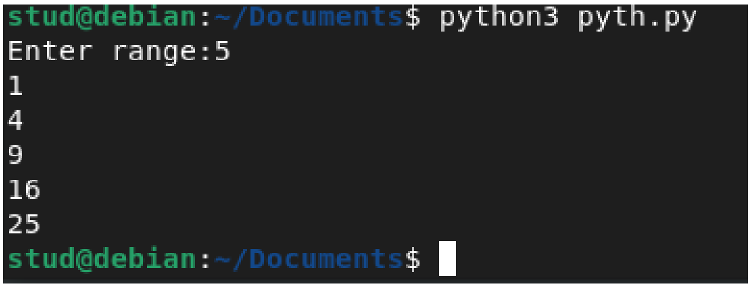
```
stud@debian:~/Documents$ python3 pyth.py
Elements in the list are: [-11, 4, 8, -34, 10, 14]
Positive numbers in the list
4
8
10
14
stud@debian:~/Documents$ 
```

b. Square of N numbers

Source code

```
n=int(input('Enter range:'))
for num in range(1,n+1):
    num=num*num
    print(num)
```

Output



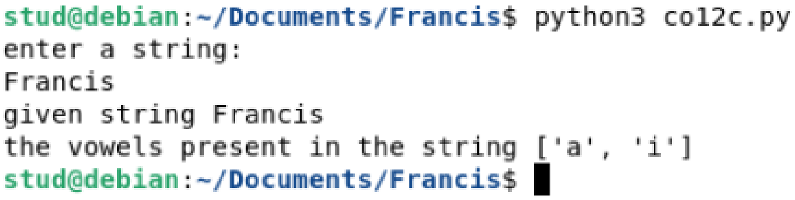
```
stud@debian:~/Documents$ python3 pyth.py
Enter range:5
1
4
9
16
25
stud@debian:~/Documents$ 
```

c. Form a list of vowels selected from a given word.

Source code

```
s=input("Enter a string: ")
list=[]
for i in s:
    if i in "aeiouAEIOU":
            list.append(i)
print("vowels in the list are:")
print(list)
```

Output



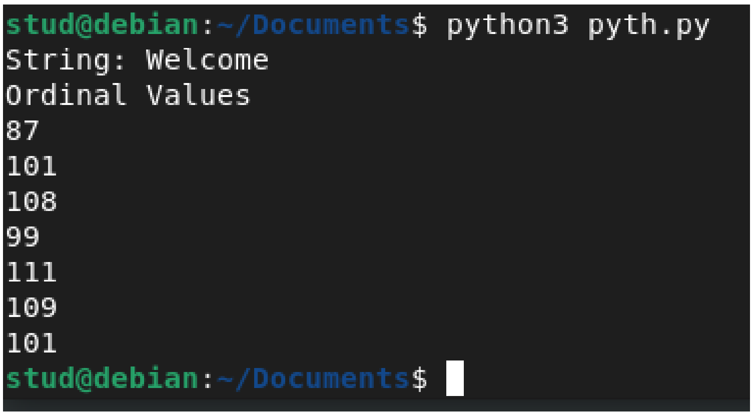
```
stud@debian:~/Documents/Francis$ python3 co12c.py
enter a string:
Francis
given string Francis
the vowels present in the string ['a', 'i']
stud@debian:~/Documents/Francis$ 
```

d. List ordinal values of each element of a word.

Source code

```
print("String: Welcome")
print("Ordinal Values")
for i in 'W','e','l','c','o','m','e':
   x=ord(i)
   print(x)
```

Output



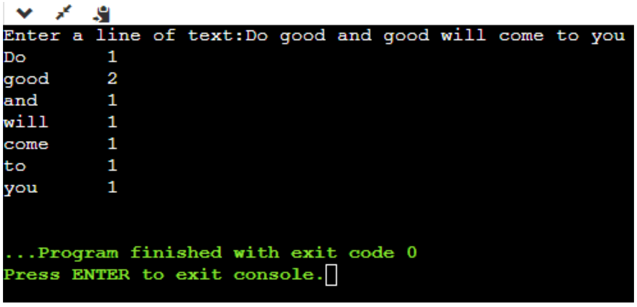
```
stud@debian:~/Documents$ python3 pyth.py
String: Welcome
Ordinal Values
87
101
108
99
111
109
101
stud@debian:~/Documents$ 
```

3) Count the occurrences of each word in a line of text.

Source code

```
list1=[]
list2=[]
x=input("Enter a line of text:")
for i in x.split(" "):
        list1.append(i)
        if i not in list2:
                list2.append(i)
for i in list2:
print(i,"\t",list1.count(i))
```

Output



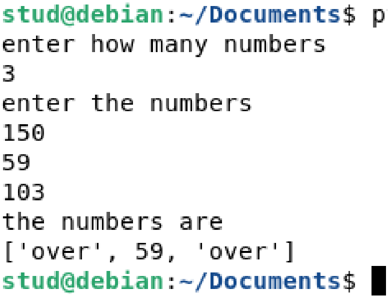
```
Enter a line of text:Do good and good will come to you
Do        1
good      2
and       1
will      1
come      1
to        1
you       1


...Program finished with exit code 0
Press ENTER to exit console.
```

4) Prompt the user for a list of integers. For all values greater than 100, store ‘over’ instead.

Source code

```
list=[]
while True:
 n=int(input('Enter an integer: '))
 if(n<=100):
          list.append(n)
 else:
          list.append('over')
          print(list)
```

Output



```
stud@debian:~/Documents$ python3 co14.py
enter how many numbers
3
enter the numbers
150
59
103
the numbers are
['over', 59, 'over']
stud@debian:~/Documents$
```

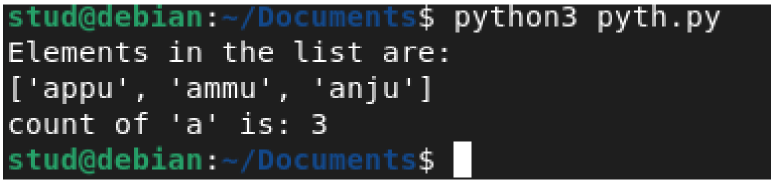
5) Store a list of first names. Count the occurrences of ‘a’ within the list.

Source code

```
 list=['ann','mariya','anju'] print("Elements in the list are:")
 print(list)
```

```
count=0
for word in list:
        for i in word:
                if i=='a':
                        count+=1
print("count of 'a' is:", count)
```

Output



```
stud@debian:~/Documents$ python3 pyth.py
Elements in the list are:
['appu', 'ammu', 'anju']
count of 'a' is: 3
stud@debian:~/Documents$
```

6) **Enter 2 lists of integers.Check**

a. **whether list are of same length**

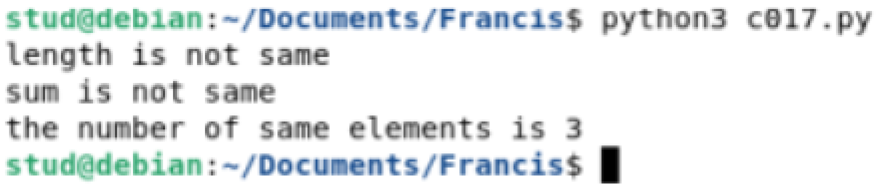
b. **whetherlist sums of same value**

c. **whether any value occur in both.**

Source code

```
l1=[1,2,3,4]
l2=[1,3,2]
print("List 1",l1)
print("List 2",l2)
x=len(l1)
y=len(l2)
if x==y:
 print("List are of same length")
else:
 print("Length of lists are different")
s1=0
s2=0
for i in range(x):
 s1=s1+l1[i]
print("Sum of elements of List1:",s1)
for j in range(y):
 s2=s2+l2[j]
print("Sum of elememts of List2:",s2)
if s1==s2:
 print("Sum of list elements is same")
else:
 print("Sum of list elements is not same")
print("Common elements are:")
for i in range(x):
 for j in range(y):
          if l1[i]==l2[j]:
                   print(l1[i])
```

Output



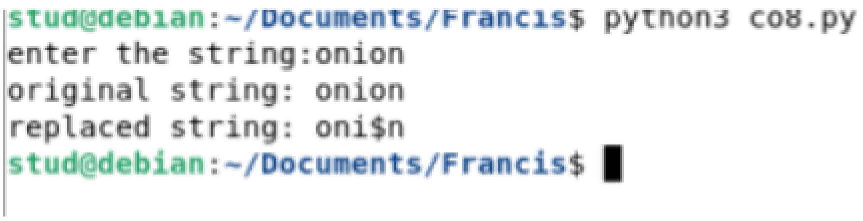
```
stud@debian:~/Documents/Francis$ python3 c017.py
length is not same
sum is not same
the number of same elements is 3
stud@debian:~/Documents/Francis$ 
```

7) Get a string from an input string where all occurrences of first character replaced with ‘$’,except first character.[eg:onion->oni$n]

Source code

```
str=input("Enter a string: ")
print("Original string is: ",str)
char=str[0]
str=str.replace(char,'$')
str=char+str[1:]
print("String: ",str)
```

Output



```
stud@debian:~/Documents/Francis$ python3 co8.py
enter the string:onion
original string: onion
replaced string: oni$n
stud@debian:~/Documents/Francis$ 
```

8) Create a string from given string where first and last characters exchanged. [eg:python->nythop]

Source code

s=input("Enter a string: ")

t=s[0]

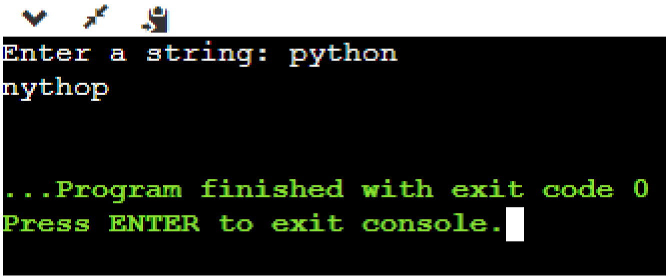
t1=s[-1]

n=len(s)

ns=t1+s[1:n-1]+t

print(ns)

Output



```
Enter a string: python
nythop


...Program finished with exit code 0
Press ENTER to exit console.
```

9) Accept the radius from the user and find the area of the circle.

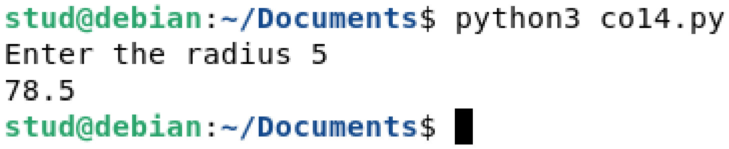
Source code

r=int(input('Enter the radius: '))

A=3.14*r*r

print(A)

Output



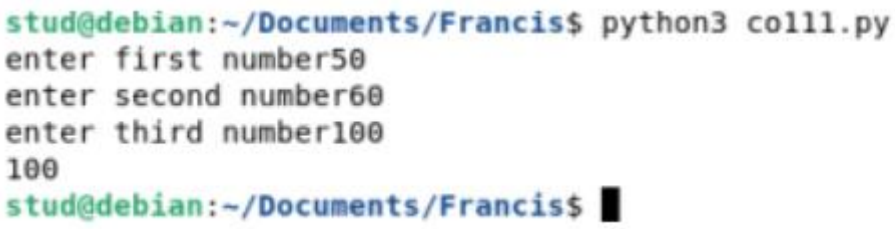
```
stud@debian:~/Documents$ python3 co14.py
Enter the radius 5
78.5
stud@debian:~/Documents$ 
```

10) Find the biggest of 3 numbers

Source code

```
a=int(input('Enter first number:'))
b=int(input('Enter second number:'))
c=int(input('Enter third number:'))
if a>b and a>c:
 print(a)
if b>a and b>c:
 print(b)
if c>a and c>b:
 print(c)
```

Output



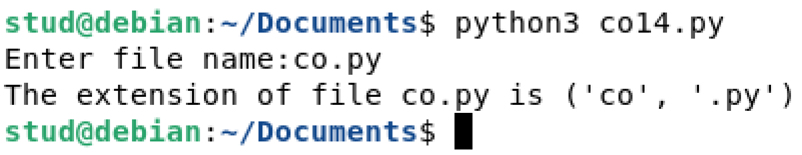
```
stud@debian:~/Documents/Francis$ python3 co111.py
enter first number50
enter second number60
enter third number100
100
stud@debian:~/Documents/Francis$ 
```

11) Accept a file name from user and print extension of that.

Source code

```
import os
a=input("Enter file name:")
print("The extension of file",a,"is",os.path.splitext(a))
```

Output



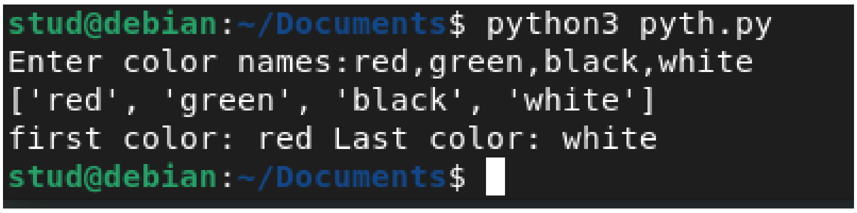
```
stud@debian:~/Documents$ python3 co14.py
Enter file name:co.py
The extension of file co.py is ('co', '.py')
stud@debian:~/Documents$ 
```

12) Create a list of colors from comma-separated color names entered by user. Display first and last colors.

Source code

```
colors=[]
str=(input("Enter color names:"))
for i in str.split(','):
 colors.append(i)
print(colors)
print("first color:",colors[0],"Last color:",colors[-1])
```

Output



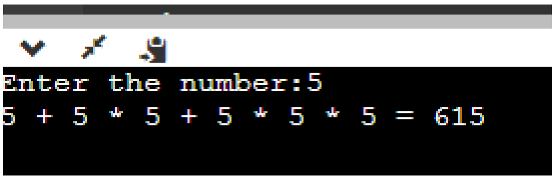
```
stud@debian:~/Documents$ python3 pyth.py
Enter color names:red,green,black,white
['red', 'green', 'black', 'white']
first color: red Last color: white
stud@debian:~/Documents$ 
```

13) Accept an integer n and compute n+nn+nnn.

Source code

```
n=int(input("Enter the number:"))
a=n*1
b=n*11
c=n*111
s=a+b+c
print(n,"+",n,"*",n,"+",n,"*",n,"*",n,"=",s)
```

Output



```
Enter the number:5
5 + 5 * 5 + 5 * 5 * 5 = 615
```

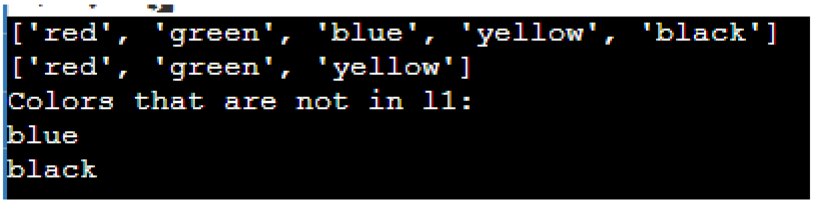
14) Print out all color from color-list1 not contained in color-list2

Source code

```
l1=['red','green','blue','yellow','black']
l2=['red','green','yellow']
print(l1)
print(l2)
print("Colors that are not in l1:
```

```
")
for i in l1:
 if i not in l2:
          print(i)
```

Output



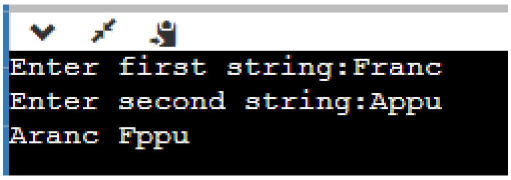
```
['red', 'green', 'blue', 'yellow', 'black']
['red', 'green', 'yellow']
Colors that are not in l1:
blue
black
```

15) Create a single string separated with space from two strings by swapping the character at position 1.

Source code

```
str1=input("Enter first string:")
str2=input("Enter second string:")
str3=str2[0]+str1[1:]+" "+str1[0]+str2[1:]
print(str3)
```

Output



```
Enter first string:Franc
Enter second string:Appu
Aranc Fppu
```

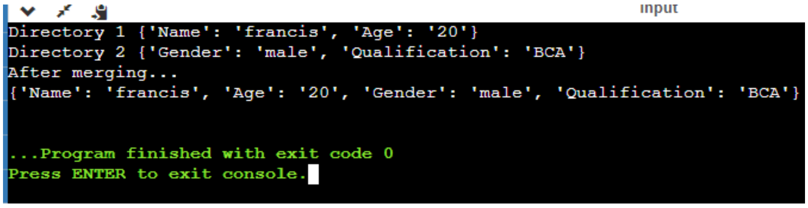
16) Merge two dictionaries.

Source code

```
D1={"Name":"Ann mariya","Age":"20"}
print("Directory 1",D1)
D2={"Gender":"Female","Qualification":"BCA"}
print("Directory 2",D2)
```

```
D1.update(D2)
print("After merging...")
print(D1)
```

Output



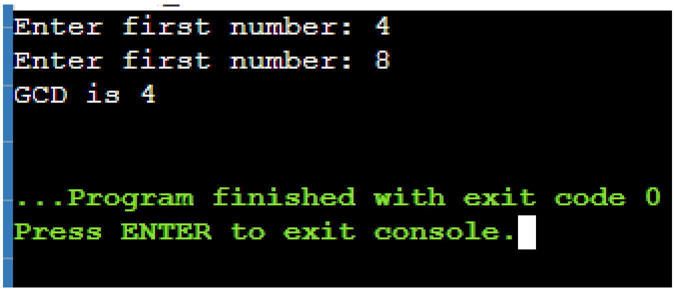
```
Directory 1 {'Name': 'francis', 'Age': '20'}
Directory 2 {'Gender': 'male', 'Qualification': 'BCA'}
After merging...
{'Name': 'francis', 'Age': '20', 'Gender': 'male', 'Qualification': 'BCA'}


...Program finished with exit code 0
Press ENTER to exit console.
```

17) Find gcd of 2 numbers

Source code

```
a=int(input("Enter first number: "))
b=int(input("Enter first number: "))
x=min(a,b)
gcd=0
for i in range (1,x+1):
 if((a%x==0) and (b%x==0)):
        gcd=i
print("GCD is",i)
```

Output



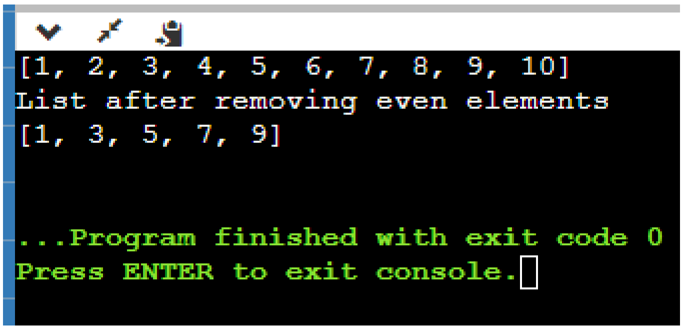
```
Enter first number: 4
Enter first number: 8
GCD is 4


...Program finished with exit code 0
Press ENTER to exit console.
```

18) From a list of integers,create a list removing even numbers.

Source code

```
l1=[1,2,3,4,5,6,7,8,9,10]
print(l1)
l2=[]
for i in range(len(l1)):
 if l1[i]%2!=0:
        l2.append(l1[i])
print("List after removing even elements")
print(l2)
```

Output



```
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
List after removing even elements
[1, 3, 5, 7, 9]


...Program finished with exit code 0
Press ENTER to exit console.
```

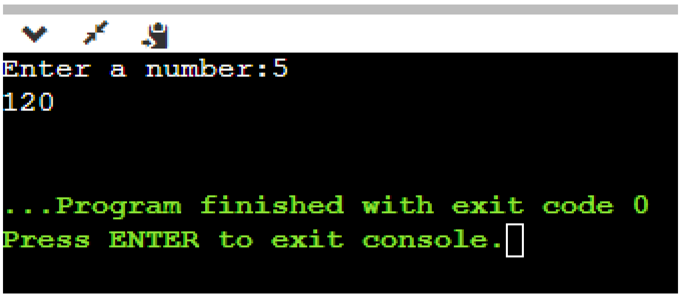
COURSE OUTCOME 2

19) Program to find the factorial of a number.

Source code

```
n=int(input('Enter a number:'))
fact=1
for i in range (1,n+1):
   fact=fact*i
print(fact)
```

Output



```
Enter a number:5
120


...Program finished with exit code 0
Press ENTER to exit console.
```

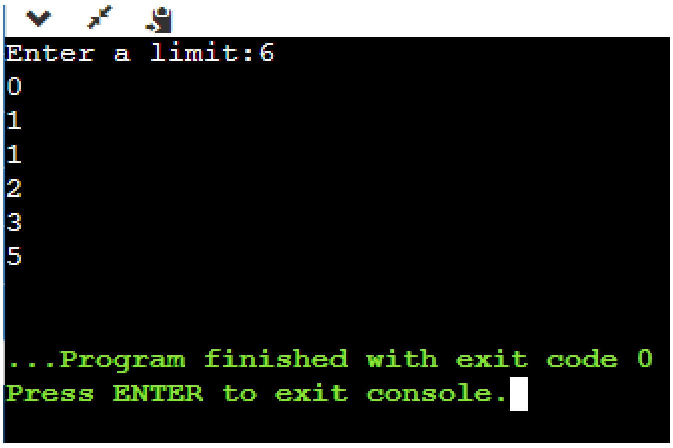
20) Generate fibonacci series of N terms.

Source code

```
n=int(input('Enter a limit:'))
a=0
b=1
```

```
print(a)
print(b)
for i in range (2,n):
        c=a+b
        print(c)
        a=b
        b=c
```

Output



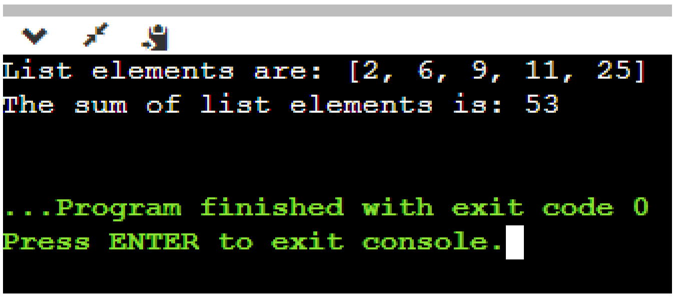
```
Enter a limit:6
0
1
1
2
3
5


...Program finished with exit code 0
Press ENTER to exit console.
```

21) Find the sum of all items in a list.

Source code

```
list=[2,6,9,11,25]
print("List elements are:",list)
sum=0
for i in list:
      sum=sum+i
print("The sum of list elements is:",sum)
```

Output



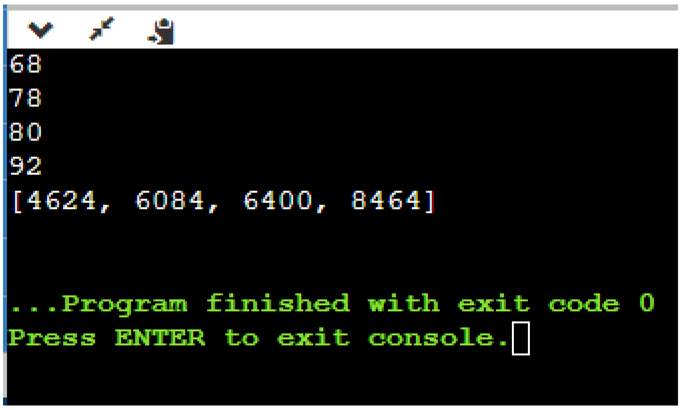
```
List elements are: [2, 6, 9, 11, 25]
The sum of list elements is: 53


...Program finished with exit code 0
Press ENTER to exit console.
```

22) Generate a list of four digit numbers in a given range with all their digits even and the number is a perfect square.

Source code

```
limit1=1000
limit2=9999
list1=[]
for i in range(limit1,limit2):
    j=i
    digit=[]
    while(i!=0):
            digit.append(i%10)
            i=int(i/10)
    count=0
    for n in digit:
            if n%2==0:
                    count=count+1
            if count==4:
                    for k in range(31,100):
                            if((k**2)==j):
                                    list1.append(j)
                                    print(k)
print(list1)
```

Output



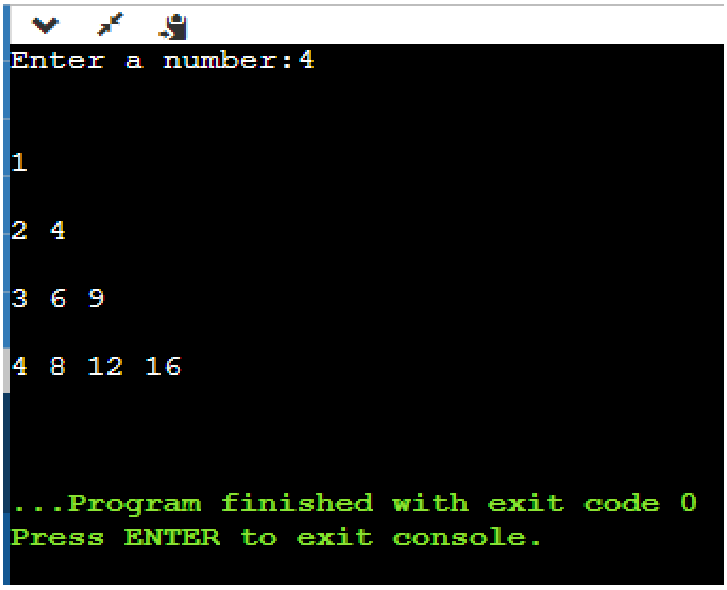
```
68
78
80
92
[4624, 6084, 6400, 8464]


...Program finished with exit code 0
Press ENTER to exit console.
```

23) Display the given pyramid with step number accepted from user.

Source code

```
n=int(input("Enter a number:"))
for j in range(0,n+1):
   for i in range(1,j+1):
            i=j*i
            print(i,end=" ")
   print("\n")
```

Output



```
Enter a number:4


1

2 4

3 6 9

4 8 12 16


...Program finished with exit code 0
Press ENTER to exit console.
```

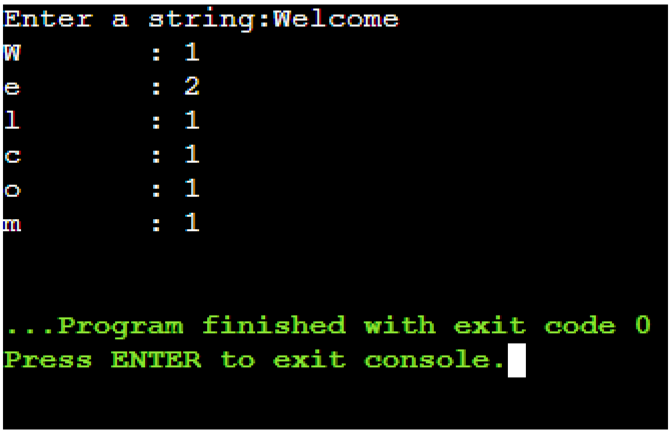
24) Count the number of characters (character frequency) in a string.

Source code

```
string=input("Enter a string:")
list1=[]
for i in string:
   if i not in list1:
```

```
            list1.append(i)
for i in list1:
    count=0
    for j in string:
            if(i==j):
                    count=count+1
    print(i,"\t:",count)
```

Output



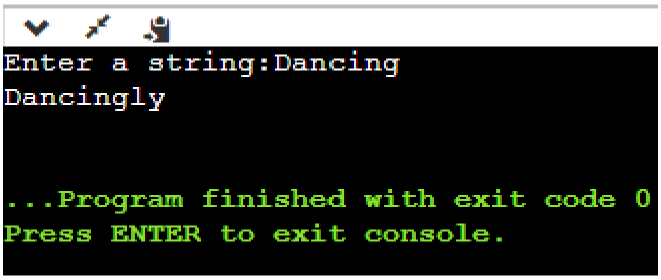
```
Enter a string:Welcome
W        :  1
e        :  2
l        :  1
c        :  1
o        :  1
m        :  1


...Program finished with exit code 0
Press ENTER to exit console.
```

25) Add ‘ing’ at the end of a given string. If it already ends with ‘ing’, then add ‘ly’.

Source code

```
string=input("Enter a string:")
if(string[-3:]=="ing"):
        string+="ly"
else:
        string+="ing"
print(string)
```

Output



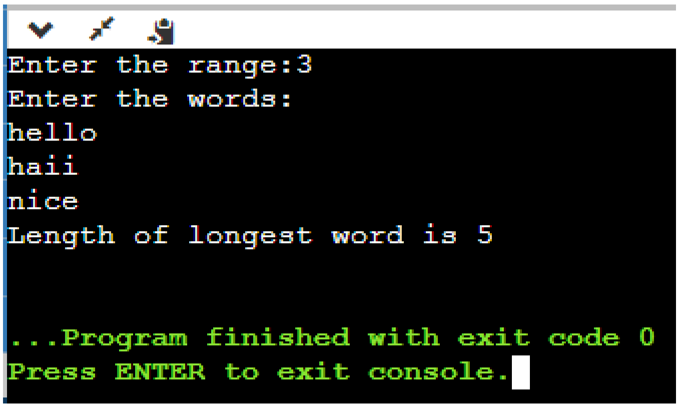
```
Enter a string:Dancing
Dancingly


...Program finished with exit code 0
Press ENTER to exit console.
```

26) Accept a list of words and return length of longest word.

Source code

```
lis=[]
n=int(input("Enter the range:"))
print("Enter the words:")
for i in range(0,n):
        lis.append(input(""))
longest=lis[0]
for i in range(1,n):
        if(len(lis[i])>len(longest)):
          longest=lis[i]
print("Length of longest word is",len(longest))
```

Output



```
Enter the range:3
Enter the words:
hello
haii
nice
Length of longest word is 5


...Program finished with exit code 0
Press ENTER to exit console.
```

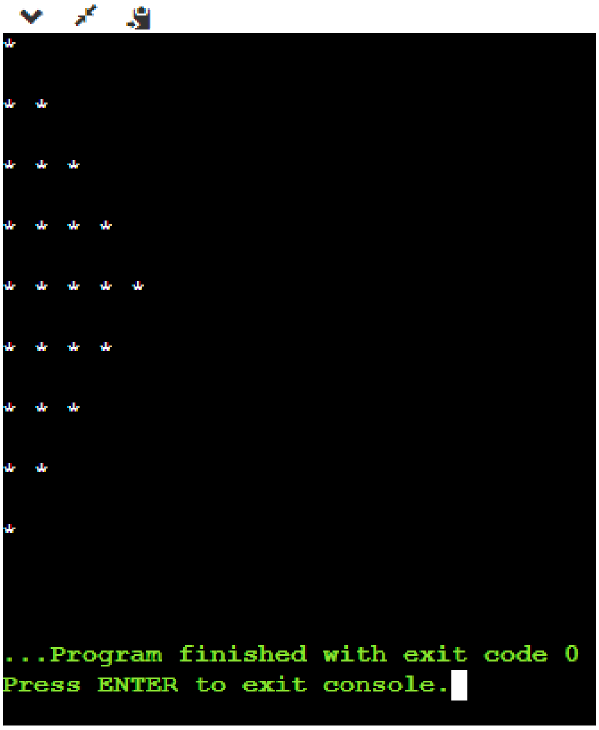
27) Construct following pattern using nested loop.

```
*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```

Source code

```
for i in range(1,6):
   for j in range(1,i+1):
             print("*",end=" ")
   print("\n")
for i in range(4,0,-1):
   for j in range(1,i+1):
             print("*",end=" ")
   print("\n")
```

Output



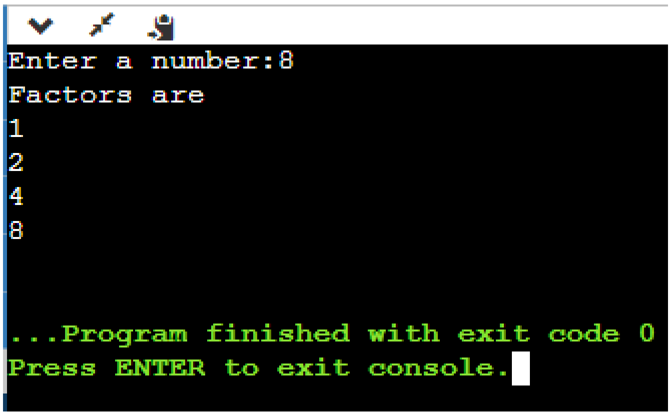
```
*

* *

* * *

* * * *

* * * * *

* * * *

* * *

* *

*



...Program finished with exit code 0
Press ENTER to exit console.
```

28) Generate all factors of a number.

Source code

```
n=int(input("Enter a number:"))
print("Factors are")
for i in range(1,n+1):
   if(n%i==0):
             print(i)
```

Output



```
Enter a number:8
Factors are
1
2
4
8


...Program finished with exit code 0
Press ENTER to exit console.
```

COURSE OUTCOME 3

29) Create a package graphics with modules rectangle, circle and sub-package 3D-graphics with modules cuboid and sphere. Include methods to find area and perimeter of respective figures in each module. Write programs that finds area and perimeter of figures by different importing statements. (Include selective import of modules and import * statements)

Source code

Graphice\circle.py

```
from math import pi
def area_circle(radius):
    return pi*radius*radius
def perimeter_circle(radius):
    return 2*pi*radius
```

Graphics\rectangle.py

```
def area_rec(length,width):
    return length*width
def perimeter_rec(length,width):
    return 2*(length+width)
```

Graphics\tdgraphics\cuboid.py

```
def area_cuboid(l,b,h):
    return 2*(l*h + b*h + l*b)
def volume_cuboid(l,b,h):
    return l*b*h
```

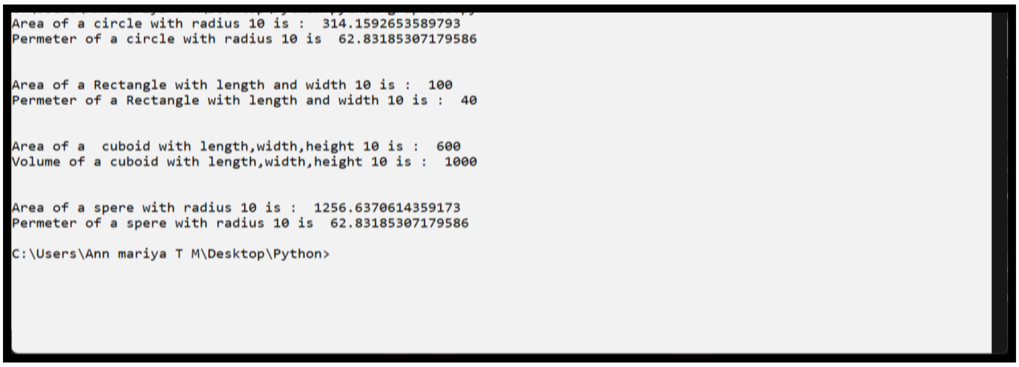
Graphics\tdgraphics\sphere.py

```
from math import pi
def area_sphere(radius):
    return 4*(pi*radius*radius)
def perimeter_sphere(radius):
    return 2*pi*radius
```

graphics.py (driver code)

```
import Graphics
from Graphics import circle,rectangle
from Graphics.tdgraphics import cuboid,sphere
from Graphics.circle import *
print("Area of a circle with radius 10 is : ",circle.area_circle(10))
print("Permeter of a circle with radius 10 is ",circle.perimeter_circle(10))
print("\n")


print("Area of a Rectangle with length and width 10 is :
        ",rectangle.area_rec(10,10))
print("Permeter of a Rectangle with length and width 10 is :
        ",rectangle.perimeter_rec(10,10))
print("\n")


print("Area of a  cuboid with length,width,height 10 is :
        ",cuboid.area_cuboid(10,10,10))
print("Volume of a cuboid with length,width,height 10 is :
        ",cuboid.volume_cuboid(10,10,10))
print("\n")
print("Area of a spere with radius 10 is : ",sphere.area_sphere(10))
print("Permeter of a spere with radius 10 is ",sphere.perimeter_sphere(10))
```

Output



```
Area of a circle with radius 10 is :  314.1592653589793
Permeter of a circle with radius 10 is  62.83185307179586


Area of a Rectangle with length and width 10 is :  100
Permeter of a Rectangle with length and width 10 is :  40


Area of a  cuboid with length,width,height 10 is :  600
Volume of a cuboid with length,width,height 10 is :  1000


Area of a spere with radius 10 is :  1256.6370614359173
Permeter of a spere with radius 10 is  62.83185307179586

C:\Users\Ann mariya T M\Desktop\Python>
```

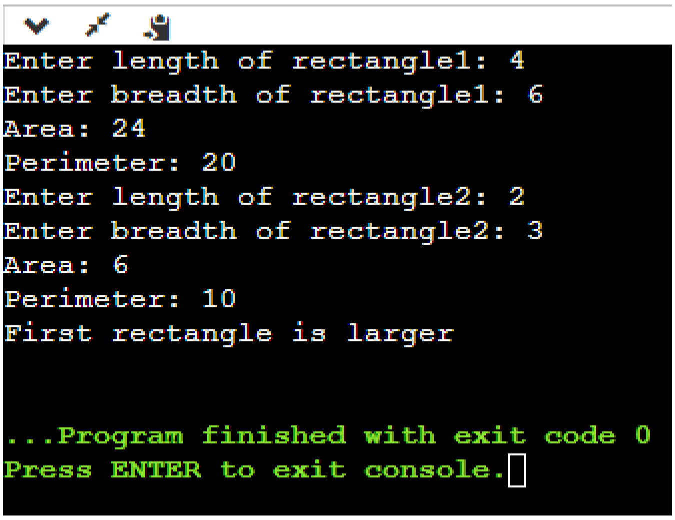
<u>COURSE OUTCOME 4</u>

30) Create Rectangle class with attributes length and breadth and methods to find area and perimeter. Compare two Rectangle objects by their area.

Source code

```
class Rectangle:
    def __init__(self,length,breadth):
            self.length = length
            self.breadth = breadth
    def area(self):
            return self.length * self.breadth
    def perimeter(self):
        return 2*(self.length + self.breadth)

l=int(input("Enter length of rectangle1: "))

b=int(input("Enter breadth of rectangle1: "))

rect1 = Rectangle(l,b)

a1=rect1.area()

p1=rect1.perimeter()

print("Area:",a1)

print("Perimeter:",p1)

l=int(input("Enter length of rectangle2: "))

b=int(input("Enter breadth of rectangle2: "))

rect2 = Rectangle(l,b)

a2=rect2.area()

p2=rect2.perimeter()

print("Area:",a2)

print("Perimeter:",p2)

if (a1>a2):

  print("First rectangle is larger")

elif a1==a2:

  print("Rectangles are of same area")

else:

  print("Second rectangle is larger")
```

Output



```
Enter length of rectangle1: 4
Enter breadth of rectangle1: 6
Area: 24
Perimeter: 20
Enter length of rectangle2: 2
Enter breadth of rectangle2: 3
Area: 6
Perimeter: 10
First rectangle is larger


...Program finished with exit code 0
Press ENTER to exit console.
```

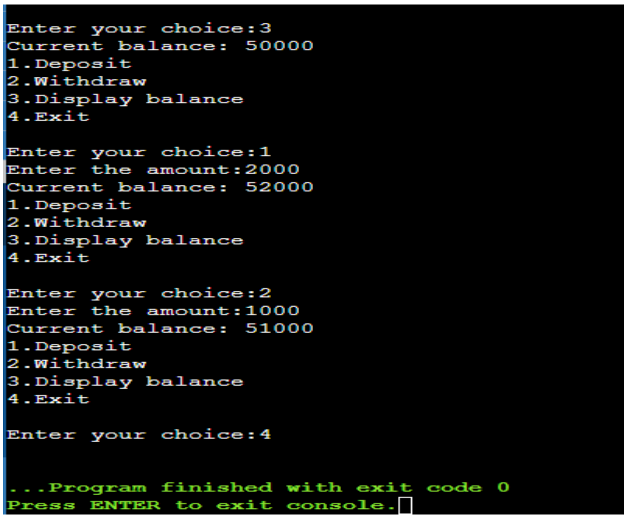
31) Create a Bank account with members account number, name, type of account and balance. Write constructor and methods to deposit at the bank and withdraw an amount from the bank.

Source code

```
class bank:
def __init__(self,acc_no,name,acc_type,bal):
            self.acc_no=acc_no
            self.name=name
            self.acc_type=acc_type
            self.bal=bal


   def deposit(self):
            self.bal=self.bal+y
            return self.bal
   def withdraw(self):
            return self.bal-y
   def display_balance(self):
```

```
            return self.bal
acc1=bank("b11","Ann","Savings",50000)
while(1):
   print("1.Deposit\n2.Withdraw\n3.Display balance\n4.Exit\n")
   ch=int(input("Enter your choice:"))
   if ch==1:
            amt=int(input("Enter the amount:"))
            b=acc1.deposit(amt)
            print("Current balance:",b)
   elif ch==2:
            amt=int(input("Enter the amount:"))
            b=acc1.withdraw(amt)
            print("Current balance:",b)
   elif ch==3:
            cb=acc1.display_balance()
            print("Current balance:",cb)
   elif ch==4:
            exit(1)
   else:
            print("Invalid choice")
```

Output



```
Enter your choice:3
Current balance: 50000
1.Deposit
2.Withdraw
3.Display balance
4.Exit

Enter your choice:1
Enter the amount:2000
Current balance: 52000
1.Deposit
2.Withdraw
3.Display balance
4.Exit

Enter your choice:2
Enter the amount:1000
Current balance: 51000
1.Deposit
2.Withdraw
3.Display balance
4.Exit

Enter your choice:4


...Program finished with exit code 0
Press ENTER to exit console.
```

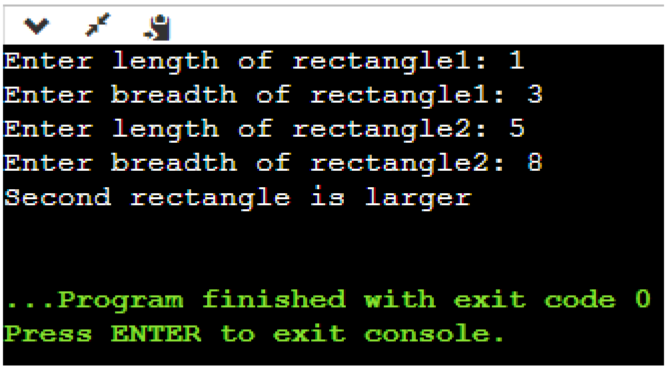
32) Create a class Rectangle with private attributes length and width. Overload '<' operator to compare the area of 2 rectangles.

Source code

```
class Rectangle:
    def __init__(self,length,breadth):

            self.__length = length

            self.__breadth = breadth

    def __lt__ (self,rect2):

            if self.__length*self.__breadth < rect2.__length*rect2.__breadth:

                    return True

            else:

                    return False

l=int(input("Enter length of rectangle1: "))

b=int(input("Enter breadth of rectangle1: "))

rect1 = Rectangle(l,b)

l=int(input("Enter length of rectangle2: "))

b=int(input("Enter breadth of rectangle2: "))
```

```
rect2 = Rectangle(l,b)

if rect1 < rect2:

   print("Second rectangle is larger")

else:

   print("First rectangle is larger")
```

output



```
Enter length of rectangle1: 1
Enter breadth of rectangle1: 3
Enter length of rectangle2: 5
Enter breadth of rectangle2: 8
Second rectangle is larger


...Program finished with exit code 0
Press ENTER to exit console.
```

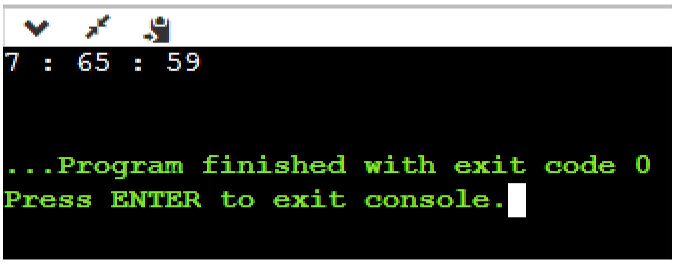
33) Create a class Time with private attributes hour, minute and second. Overload '+' operator to find sum of 2 time.

Source code

```
class Time:

   def __init__(self,h,m,s):

      self.__hour=h

      self.__minute=m

      self.__second=s

   def __add__(self,ob):

      hour=self.__hour+ob.__hour

      minute=self.__minute+ob.__minute
```

```
        second=self.__second+ob.__second
        t=Time(hour,minute,second)
        return t

    def print_it(self):
        print("Hour :",self.__hour)
        print("Minute :",self.__minute)
        print("Second :",self.__second)

t1=Time(10,10,10)
t2=Time(20,20,20)
t3=t1+t2
t3.print_it()
```

Output



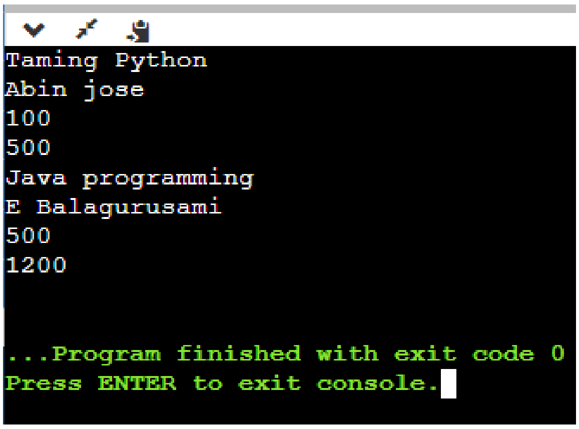
```
7 : 65 : 59


...Program finished with exit code 0
Press ENTER to exit console.
```

34) Create a class Publisher (name). Derive class Book from Publisher with attributes title and author. Derive class Python from Book with attributes price and no_of_pages. Write a program that displays information about a Python book. Use base class constructor invocation and method overriding.

Source code

```
class Publisher(object):
    def __init__(self,name):
        self.name=name
    def display1(self):
        print(self.title)
        print(self.author)
        class Book(Publisher):
    def __init__(self,name,title,author):
        super().__init__(name)
        self.title=title
        self.author=author
    def display2(self):
        #super().display1()
        print(self.title)
        print(self.author)
class Python(Book):
    def __init__(self,name,title,author,price,no_of_pages):
        super().__init__(name,title,author)
        self.price=price
        self.no_of_pages=no_of_pages
    def display3(self):
        super().display2()
        print(self.price)
        print(self.no_of_pages)
p=Python("ABC Publications","Gaming Python","Gokul",100,500)
p.display3()
q=Python("XYZ Publications","Java programming","E
Balagurusami",500,1200)
q.display3()
```

Output



```
Taming Python
Abin jose
100
500
Java programming
E Balagurusami
500
1200


...Program finished with exit code 0
Press ENTER to exit console.
```

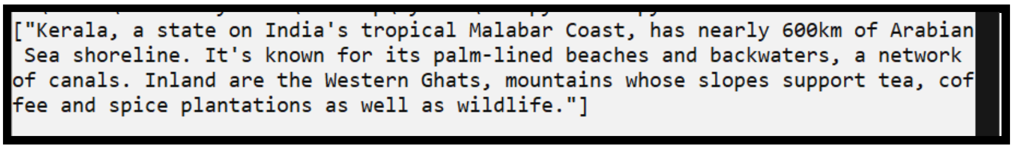
COURSE OUTCOME 5

35) Write a Python program to read a file line by line and store it into a list.

Source code

```
fp=open("text_file.txt",'r')
lines=[]
for line in fp:
        lines.append(line.strip())
print(lines)
```

Output



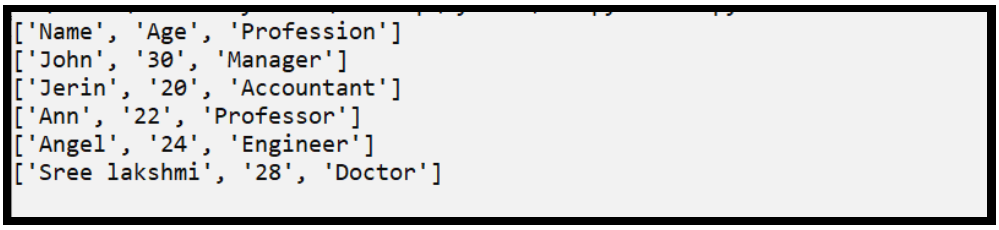
```
["Kerala, a state on India's tropical Malabar Coast, has nearly 600km of Arabian
 Sea shoreline. It's known for its palm-lined beaches and backwaters, a network
of canals. Inland are the Western Ghats, mountains whose slopes support tea, cof
fee and spice plantations as well as wildlife."]
```

36) Write a Python program to read each row from a given csv file and print a list of strings.

Source code

```
import csv

with open('people.csv', 'r') as file:

    reader = csv.reader(file)
    for row in reader:
        print(row)
```

Output



```
['Name', 'Age', 'Profession']
['John', '30', 'Manager']
['Jerin', '20', 'Accountant']
['Ann', '22', 'Professor']
['Angel', '24', 'Engineer']
['Sree lakshmi', '28', 'Doctor']
```