

PROGRAM No - 1

AIM - Python Program to find area

```
def area(r):
```

```
Pi = 3.14
```

```
return Pi * (r * r);
```

```
num = float(input("enter the value for :"))
print("Area is %f" % area(num));
```

RESULT :- The program has been executed and the output was verified.

PROGRAM No - 1 OUTPUT

Output

enter the value for π^3

Area is 28.26000

Program No - 2

Aim: Python Program to find largest among 3 Nos.

```
number 1 = float ( input ("enter the first number : " ) )
number 2 = float ( input ("enter the second number : " ) )
number 3 = float ( input ("enter the third number : " ) )

if ( number 1 > number 2 ) & ( number 1 > number 3 ):
    largest = number 1
elif ( number 2 > number 1 ) & ( number 2 > number 3 ):
    largest = number 2
else :
    largest = number 3

print ( "The largest number is ", largest )
```

Result: The program has been executed and the output was verified.

Program No - 2 OUTPUT

Output

enter the first number : 2

enter the second number : 4

enter the third number : 5

The largest number is 5

PROGRAM No - 3

AIM - Python program to find square of number

```
digit = int ("enter an integer number :")
square = digit * digit
print ("Square of {} digit is {} square".format(digit, square))
```

RESULT : The program has been executed and the output was verified.

Program No - 3

OUTPUT

Enter the integer number : 4

Square of 4 is 16.

PROGRAM No - 4

AIM - Python program to find area of circle.

```
from math import pi
```

```
r = float(input("Input the radius of the Circle :"))
print("The area of the Circle with radius", r, "is:", pi * r * r)
```

RESULT : The program has been executed and the output was verified.

PROGRAM

No

=

OUTPUT

(("Area and perimeter calculation"))

Output

Input the radius of the Circle : 4

The area of the Circle with radius 4.0 is :

50.2654

PROGRAM No - 5

AIM - Python program to find Square of n

List 1 = [14, 20, 13, 8, 6, 2]

for n in list 1:

 square = n * n
 print (n, squared is, square)RESULT : The program has been executed and
the output was verified.

PROGRAM No - 5~~Program and its output~~ OUTPUTOutput

14 squared is 196

15 squared is 225

20 squared is 400

13 squared is 169

8 squared is 64

6 squared is 36

2 squared is 4

PROGRAM No - 6

~~TOPIC~~ ~~5. all methods~~
AIM - Python program to find vowels in a string

```
String A = "Hello... how are you"
print ("Given String: \n", String A)
vowels = "AaEeIiOoUu"
res = set([each for each in String A if each
          in vowels])
print ("The vowels present in the String : \n", res)
```

RESULT : The program has been executed and the output was verified.

PROGRAM No - 6

OUTPUT

Output

[s, a, e, o, u]

Given String :

Hello, how are you

The vowels present in the String :

{'u', 'a', 'e', 'o' }.

PROGRAM No - 7

Aim - Python Program to count words in a Sentence

```
def word_count(str):
    counts = dict()
    words = str.split()

    for word in words:
        if word in counts:
            counts[word] += 1
        else:
            counts[word] = 1

    return counts
```

print(word_count('when you change the quality of
your thinking, you change the quality of your
life sometimes instantly'))

RESULT : The program has been executed and
the output was verified.

Program No - 7

OUTPUT

Output

```
{'when': 1, 'you': 2, 'Change': 2, 'the': 2,  
'quality': 2, 'of': 2, 'your': 2, 'thinking':  
'Life': 1, 'Sometimes': 1, 'instantly': 1}
```

PROGRAM No. 8

AIM - Python program to Count a in a list

a = ['auto', 'Scban', 'roshan', 'Joseph']

str I = ("".join(a))

Count = 0

for i in str I:

if i == 'a':

Count = Count + 1

print ("Count of a in the list is : " + str(Count))

RESULT : The program has been executed and
the output was verified.

PROGRAM No - 8 all programs OUTPUT

Output

Count of a is the list is = 3

Program No - 9

AIM - Python program to check the length of lists.

List 1 = [10, 10, 11, 12, 12, 13, 14, 16, 15, 16, 12]

List 2 = [16, 12, 13, 14, 15, 16, 10, 11, 12, 10, 12]

len 1 = len (list 1)

len 2 = len (list 2)

if len 1 = len 2 :

print ('both list have equal length')

else :

print ('both list doesn't have equal length')

RESULT : The program has been executed and the output was verified.

Program No - 9 Output

Different numbers (length) when I
Output

Both we have equal length.

Program No - 10

10/10 marks

AIM - Python program to Check the sum of Lists

List 1 = [10, 10, 11, 12, 12, 13, 14, 15, 15, 16, 12]

List 2 = [16, 12, 13, 14, 15, 16, 10, 11, 12, 10, 12]

total 1 = sum (list 1)

total 2 = sum (list 2)

if total 1 = total 2:

print ('Both list have equal sum')

else :

print ('Both list doesn't have equal sum')

RESULT : The program has been executed
and the output was verified.

Program No - 10

Output

Output

Both lists have equal sum.

Program No - 11

AIM - Python program to check the common elements in two lists.

List 1 = [10, 10, 11, 12, 12, 13, 14, 16, 15, 16, 12]

List 2 = [10, 10, 11, 12, 12, 16, 14, 16, 15, 19, 12]

for value in List 1:

 if value in List 2:

 common = 1

 if common == 1:

 print ("these are common elements")

else:

 print ("no common elements")

RESULT : The program has been executed and output was verified.

PROGRAM No - 11

Output

These \oplus are common elements.

PROGRAM No - 12

AIM - Python Program to replace a character

```
def change_char (str1):
```

```
    char = str1 [0]
```

```
    str1 = str1.replace (char, '$')
```

```
    str1 = char + str1 [1:]
```

```
print (change_char ('refresh'))
```

Result : The program has been executed and the output was verified.

PROGRAM No-12 Output

[using 2 dimensional array & pointer]

Output [A, B, C, D, E, F, G, H, I]

[using 2 dimensional array & pointer]

refresh.

[using 2 dimensional array & pointer]

PROGRAM No - 13

AIM - Python Program to exchange the first and last letter in a String.

def Change String (str1):

 return Str1 [-1:] + str1 [1:-1] + str1 [0]

print (Change String ('pineapple'))

Result : The program has been executed and the output was verified.

PROGRAM No = 13

OUTPUT

Output

pineapple

((Ranjan D) and Sonal)

PROGRAM No - 14

AIM - Python program to Merge 2 dictionaries

```
def Merge (dict1, dict2):
    return (dict2.update(dict1))
```

```
dict1 = { 'a': 10, 'b': 8 }
```

```
dict2 = { 'd': 5, 'c': 2 }
```

```
print (Merge (dict1, dict2))
```

```
print (dict2)
```

Result: The program has been executed and the output was verified.

PROGRAM No - 14

OUTPUT

output

None

{'d':5, 'c':2, 'a':10, 'b':8}

PROGRAM No - 15

AIM - Python Program to ascend and decent dictionary.

import operator

d = {1: 2, 3: 4, 4: 3, 2: 1, 0: 0}

print ('original dictionary :', d)

Sorted-d = sorted (d.items (), key = operator.itemgetter(1))
 print ('Dictionary in ascending order by value :',
 sorted-d).

Sorted-d = dict (sorted(d.items (), key = operator.itemgetter(1), reverse = True))

Print ('Dictionary in descending order by value :',
 sorted-d).

Result → The program has been executed and
 the output was verified.

PROGRAM No - 15

OUTPUT

Output

Original dictionary : { 1: 2, 3: 4, 4: 3, 2: 1 }

Dictionary is ascending order by value :

[(0,0), (2,1), (1,2), (4,3), (3,4)]

Dictionary in descending order by value :

{ 3:4, 4:3, 1:2, 2:1, 0:0 }

PROGRAM No - 16

~~AIM - Python program to remove even Nos from the list.~~

~~list = [11, 22, 33, 44, 55, 66, 77, 88, 99]~~

~~print (list)~~

~~for i in list :~~

~~if (i % 2 == 0)~~

~~list.remove(i)~~

~~print ("List after removing : ", list)~~

RESULT : The program has been executed and the output was verified.

PROGRAM No - 16

OUTPUT

Output

$[11, 22, 33, 44, 55, 66, 77, 88, 99]$

List after removing 3 $[11, 33, 55, 77, 99]$

PROGRAM No - 17

AIM - Python Program to find gcd of number

```
def gcd(a,b):
    if (b == 0):
        return a
    return gcd(b, a%b)
```

a = 45

b = 65

if (gcd(a,b)):

- print ('GCD of 'a' and b is'gcd(a,b))

else:

print ('not found')

Result: The program has been executed and the output was verified.

PROGRAM No - 17

OUTPUT

Output

GCD of 45 and 65 is 5

PROGRAM No - 18

~~AIM - Python program to find factorial of a number~~

```

num = int(input("Enter a number :"))
factorial = 1
if num < 0:
    print("Sorry, factorial does not exist for negative numbers")
elif num == 0:
    print("The factorial of 0 is 1")
else:
    for i in range(1, num+1):
        factorial = factorial * i
    print("The factorial of", num, "is", factorial)

```

Result:

- The program has been executed and the output was verified.

PROGRAM No - 18

OUTPUT

Output

Enter a number to find its factorial

The factorial of 5 is 120

Program No - 19

AIM - Python program to find fibonacci sequence

```

def recur_fibo(n):
    if n <= 1:
        return n
    else:
        return (recur_fibo(n-1) + recur_fibo(n-2))

n_terms = int(input("How many terms?"))

if n_terms <= 0:
    print("Please enter a +ve integer")
else:
    print("Fibonacci Sequence:")
    for i in range(n_terms):
        print(recur_fibo(i))

```

RESULT : The program has been executed and the output was verified.

PROGRAM No - 19

OUTPUT

Output

How many terms? . 4

Fibonacci Sequence is :

0 Fibonacci sequence

1

1. 0 for forward
2.

1

Program No - 20

AIM - Python program to perform String function.

```
def add_string (str1):
    length = len (str1)

    if length > 1:
        if str1 [-3:] == "ing":
            str1 += 'ly'
        else:
            str1 += 'ing'

    return str1
```

```
print (add_string ('do'))
print (add_string ('according'))
```

RESULT: The program has been executed
and the output was verified.

PROGRAM No - 20

OUTPUT

Output

closing
accordingly.

PROGRAM No - 21

AIM - Python program to perform the sum of given items.

```
numbers = [1, 2, 3, 4, 5, 2, 5]
sum = sum(numbers)
print(sum)
```

RESULT - The program has been executed and the output was verified.

PROGRAM No - 21

OUTPUT

Output

22