

Date: 14/01/2021

Program No: 1

AIM: Python program to find area

```
def area(x):
```

```
    Pi = 3.14
```

```
    return Pi * (x * x);
```

```
num = float(input("Enter the value for:"))
```

```
print("Area is %.6f" % area(num));
```

RESULT:

The program has been <sup>executed</sup> verified and the output was verified.

## Output

Enter the value for : 6

Area is 113.04

Date: 16/01/2021

Program No: 2.

Aim: Python program to find largest among 3 numbers.

```
num1 = int(input("Enter first number"))  
num2 = int(input("Enter second number"))  
num3 = int(input("Enter third number"))
```

```
if num1 > num2 and num1 > num3:
```

```
    print("largest is:", num1)
```

```
elif num2 > num1 and num2 > num3:
```

```
    print("largest is:", num2)
```

```
else:
```

```
    print("largest is:", num3)
```

Result:

The program has been executed and the output was verified.



## Output

Enter first number : 5

Enter second number : 6

Enter third number : 7

largest is : 7

Date: 16/01/2021

Program no: 3

AIM: Python program to find square of a number.

```
number = float(input("please enter any numeric  
value:"))
```

```
square = number ** 2
```

```
print("The square of given number is", square)
```

Result:

The program has been executed and output was verified.

## OUTPUT

Please enter any numeric value: 5

The square of given number is: 25.00



Date: 26/01/2021

Program no: 4.

AIM: Python program to find area of circle.

```
from math import pi
```

```
r = float(input("Enter the radius of the circle: "))
```

```
print("The area of the circle with radius" +  
      str(r) + " is: " + str(pi * r ** 2))
```

### RESULTS

The program has been executed and the output was verified.

## Output

Input the radius of the circle: 4

The area of the circle with radius 4.0 is:  
50.2654.



Date: 26/01/2021

Program no: 5

AIM: Python program to find square of n

list 1 = [14, 16, 8, 3]

```
for n in list1:
```

```
    square = n * n
```

```
    print(n, squared is ', square)
```

RESULT:-

The program has been executed and the output was verified.

## Output

14 squared is 196

16 squared is 256

8 squared is 64

3 squared is 9



Date: 26/01/2021

Program no: 6

AIM: Python program to find vowels in a string.

String A = "Have a nice day"

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.



## Output

Given string:

Have a nice day

The vowels present in the string:

{ 'a', 'e', 'i' }

Date : 26/01/2021

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 ('Winning doesn't always mean  
being first. Winning mean you're doing better  
than you've done before.'))
```

Result:

The program has been executed and output was verified.



## Output:

{ 'kliming': 2, 'doesn't': 1, 'always': 1, 'mean': 2,  
'being': 1, 'first': 1, 'you're': 1, 'doing': 1,  
'better': 1, 'than': 1, 'you've': 1, 'done': 1,  
'before': 1 }



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Program No: 8.

AIM: Python program to count a in a list.

```
a = ['apple', 'mango', 'grapes', 'banana']
```

```
str1 = ''.join(a)
```

```
count = 0
```

```
for i in str1:
```

```
    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.

## Output:

Count of a in the list is : 6



Date: 26/01/2021

Program no. 9

AIM: Python program to check the lengths of lists.

list1 = [1, 2, 3, 4, 5, 6]

list2 = [6, 7, 8, 9, 10, 11]

len1 = len(list1)

len2 = len(list2)

if len1 == len2:

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.



Output:

both list have equal length.

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Program no: 10

AIM: Python program to check the sum of lists.

```
list1 = [1, 2, 3, 4, 5, 6, 7]
```

```
list2 = [2, 4, 1, 7, 6, 3, 5]
```

```
total1 = sum(list1)
```

```
total2 = sum(list2)
```

```
if total1 == total2:
```

```
    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.



Output

both list have equal sum.

[2, 3, 4, 5, 6, 1] = 1

[11, 0, 7, 8, 9, 2] = 0

(1, 1) val =

(2, 2) val =

: val = 100

(1, 1) val = 100

(1, 1) val = 100

the program has been completed and the



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Program no:11

Aim: Python program to check whether any value occurs in both.

list1 = [1, 2, 3, 4, 5, 6, 7]

list2 = [7, 3, 4, 2, 1, 5, 6]

for value in list1:

common = 1

if common == 1:

print('there are common element')

else:

print('no common element')

Result:-

The program has been executed and the output was verified.

## Output

there are common element.

[1, 2, 3, 4, 5, 6] = list1

[2, 3, 4, 5, 6, 7] = list2

(list1) sum = 21

(list2) sum = 27

: list1 == list2 = 0

(list1) sum = 21

(list2) sum = 27

the program has been executed and the output is verified.



Date: 26/1/2021

Program no: 12

AIM: Get a string from an input string where all occurrences of first character replaced with '\$', except first character.

```
def change_char (str1):  
    char = str1 [0]  
    str1 = str1.replace (char, '$')  
    str1 = char + str1 [1:]  
    return str1  
print (change_char ('classic'))
```

Result:

The program has been executed and the output was verified.

Output:

classif

[1, 0, 0, 0, 0, 0, 0] = 1

[0, 0, 1, 0, 0, 0, 0] = 2

Value of list:

1 = common

1 = common

Print ('There are common elements')

Print ('No common elements')

Result:

The program has been executed and the output is verified.



Date: 26/1/21

Program No: 13

AIM: Create a string from given string where first and last characters exchanged.

```
sts = "laptop"
```

```
print (sts)
```

```
print (sts [-1:] + sts [1:-1] + sts [:1])
```

Result:

The program has been executed and the output has verified.

Output:

laptop

paptol

change class (str):

class = str [0]

str = str + class (str)

str + class [1:]

str

print (change - class)

Result:

The program has been executed and the

output was verified.



Date: 26/1/2021

Program no: 14

AIM: Accept an integer  $n$  and compute its sum.

```
n = int(input("Enter a number n: "))
```

```
temp = str(n)
```

```
t1 = temp + temp
```

```
t2 = temp + temp + temp
```

```
comp = n + int(t1) + int(t2)
```

```
print("The value is:", comp)
```

Result:-

The program has been executed and the output has verified.

Output!

Enter a number n: 8

The value is 584



Date: 26/1/2021

Program no: 15.

AIM: Find gcd of 2 numbers

```
def ComputeGCD(a, b):
```

```
    if b == 0:
```

```
        return a
```

```
    else:
```

```
        return ComputeGCD(b, a%b)
```

```
num1 = int(input("Enter the first number:"))
```

```
num2 = int(input("Enter the second number:"))
```

```
print(ComputeGCD(num1, num2))
```

Result:

The program has been executed and the output has verified.

Output:-

Enter the first number: 8

Enter the second number: 6

R