1. Python program to add to numbers.

Program:

num1 = 15

num2 = 12

sum = num1 + num2

print("Sum of {0} and {1} is {2}" .format(num1, num2, sum))

Output:

Sum of 15 and 12 is 27

1. Maximum of two numbers in Python

Program:

a = 2

b = 4

maximum = max(a, b)

print(maximum)

Output:

4

1. Python program for a factorial of a number.

Program:

def factorial(n):

if n < 0:

return 0

elif n == 0 or n == 1:

return 1

else:

fact = 1

while(n > 1):

fact \*= n

n -= 1

return fact

num = 5;

print("Factorial of",num,"is",

factorial(num))

Output:

Factorial of 5 is 120

1. Python program for simple interest.

Program:

def simple\_interest(p,t,r):

print('The principal is', p)

print('The time period is', t)

print('The rate of interest is',r)

si = (p \* t \* r)/100

print('The Simple Interest is', si)

return si

simple\_interest(8, 6, 8)

Output:

The principal is 8

The time period is 6

The rate of interest is 8

The Simple Interest is 3.84

3.84

1. Python program for compound interest.

Program:

def compound\_interest(principle, rate, time):

Amount = principle \* (pow((1 + rate / 100), time))

CI = Amount - principle

print("Compound interest is", CI)

compound\_interest(10000, 10.25, 5)

Output:

Compound interest is 6288.946267774416

1. Python program to check Aemstrong number.

Program:

def power(x, y):

if y == 0:

return 1

if y % 2 == 0:

return power(x, y // 2) \* power(x, y // 2)

return x \* power(x, y // 2) \* power(x, y // 2)

def order(x):

n = 0

while (x != 0):

n = n + 1

x = x // 10

return n

def isArmstrong(x):

n = order(x)

temp = x

sum1 = 0

while (temp != 0):

r = temp % 10

sum1 = sum1 + power(r, n)

temp = temp // 10

return (sum1 == x)

x = 153

print(isArmstrong(x))

x = 1253

print(isArmstrong(x))

Output:

True

False

1. Python program to find area of a circle.

Program:

def findArea(r):

PI = 3.142

return PI \* (r\*r);

print("Area is %.6f" % findArea(5));

Output:

Area is 78.550000

1. Python program to print all prime numbers in an interval.

Program:

def prime(x, y):

prime\_list = []

for i in range(x, y):

if i == 0 or i == 1:

continue

else:

for j in range(2, int(i/2)+1):

if i % j == 0:

break

else:

prime\_list.append(i)

return prime\_list

starting\_range = 2

ending\_range = 7

lst = prime(starting\_range, ending\_range)

if len(lst) == 0:

print("There are no prime numbers in this range")

else:

print("The prime numbers in this range are: ", lst)

Output:

The prime numbers in this range are: [2, 3, 5]

1. Python program to check whether a number is prime or not.

Program:

num = 11

if num > 1:

for i in range(2, int(num/2)+1):

if (num % i) == 0:

print(num, "is not a prime number")

break

else:

print(num, "is a prime number")

else:

print(num, "is not a prime number")

Output:

11 is a prime number

1. Python program for n-th fibonacci number.

Program:

def Fibonacci(n):

if n<= 0:

print("Incorrect input")

elif n == 1:

return 0

elif n == 2:

return 1

else:

return Fibonacci(n-1)+Fibonacci(n-2)

print(Fibonacci(10))

Output:

34

1. Python program for how to check if a given number is fibonacci number?

Program:

import math

def isPerfectSquare(x):

s = int(math.sqrt(x))

return s\*s == x

def isFibonacci(n):

return isPerfectSquare(5\*n\*n + 4) or isPerfectSquare(5\*n\*n - 4)

for i in range(1,11):

if (isFibonacci(i) == True):

print (i,"is a Fibonacci Number")

else:

print (i,"is a not Fibonacci Number ")

Output:

1 is a Fibonacci Number

2 is a Fibonacci Number

3 is a Fibonacci Number

4 is a not Fibonacci Number

5 is a Fibonacci Number

6 is a not Fibonacci Number

7 is a not Fibonacci Number

8 is a Fibonacci Number

9 is a not Fibonacci Number

10 is a not Fibonacci Number

1. Python program for a n'th multiple of a number in fibonacci series.

Program:

def findPosition(k, n):

f1 = 0

f2 = 1

i =2;

while i!=0:

f3 = f1 + f2;

f1 = f2;

f2 = f3;

if f2%k == 0:

return n\*i

i+=1

return

n = 5;

k = 4;

print("Position of n\'th multiple of k i.e,4 in "

"Fibonacci Series is", findPosition(k,n));

Output:

Position of n'th multiple of k i.e,4 in Fibonacci Series is 30

1. Program to print ASCII value of a character.

Program:

c = 'g'

print("The ASCII value of '" + c + "' is", ord(c))

Output:

The ASCII value of 'g' is 103

1. Python program for sum of squares of first n natural numbers.

Program:

def squaresum(n) :

sm = 0

for i in range(1, n+1) :

sm = sm + (i \* i)

return sm

n = 4

print(squaresum(n))

Output:

30

1. Python program for cube sum of first n natural numbers.

Program:

def sumOfSeries(n):

sum = 0

for i in range(1, n+1):

sum +=i\*i\*i

return sum

n = 5

print(sumOfSeries(n))

Output:

225