1. Write a Python program to find those numbers which are divisible by 7 and multiple of 5, between 1500 and 2700 (both included).

List=[]

for x in range(1500, 2701):

    if (x%7==0) and (x%5==0):

        List.append(str(x))

print (','.join(List))

Answer: 1505,1540,1575,1610,1645,1680,1715,1750,1785,1820,1855,1890,1925,1960,1995,2030,2065,2100,2135,2170,2205,2240,2275,2310,2345,2380,2415,2450,2485,2520,2555,2590,2625,2660,2695

1. Python program to add two numbers

num1 = 15000

num2 = 2700

# Add two numbers

sum = num1 + num2

# Display the sum

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

Answer:

The sum of 15000 and 2700 is 17700

1. Maximum of two numbers in Python

**def** maximum(a, b):

**if** a >**=** b:

**return** a

**else**:

**return** b

# Driver code

a **=** 2

b **=** 4

print(maximum(a, b))

Answer : 4

1. Python Program for factorial of a number

# To take input from the user

num = int(input("Enter a number: "))

factorial = 1

# check if the number is negative, positive or zero

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)

Answer: Enter a number: 10

The factorial of 10 is 3628800

1. Python Program for simple interest

Amount = int(input("Enter amount: "))

# Enter the number of years

Year = int(input("Enter year: "))

# Enter the rate of interest

Rate = float(input("Enter year: "))

# Calculate the simple interest

SI = (Amount\*Year\*Rate)/100

print("The simple interest is:", SI)

Answer:

Enter amount: 1000

Enter year: 12

Enter year: 13

The simple interest is: 1560.0

1. Python Program for compound interest

Amount = int(input("Enter amount: "))

# Enter the number of years

Year = int(input("Enter year: "))

# Enter the rate of interest

Rate = float(input("Enter year: "))

# Calculate the simple interest

ci =  Amount \* (pow((1 + Rate / 100), Year))

print("The Compound interest is:", ci)

Answer:

Enter amount: 1000

Enter year: 12

Enter year: 5

The Compound interest is: 1795.8563260221301

1. Python Program to check Armstrong Number

# take input from the user

num = int(input("Enter a number: "))

# initialize sum

sum = 0

# find the sum of the cube of each digit

temp = num

while temp > 0:

   digit = temp % 10

   sum += digit \*\* 3

   temp //= 10

# display the result

if num == sum:

   print(num,"is an Armstrong number")

else:

   print(num,"is not an Armstrong number")

Answer: Enter a number: 12

12 is not an Armstrong number

1. Python Program for Program to find area of a circle

def findArea(r):

  r=int(input("Enter a number: "))

    PI = 3.142

    return PI \* (r\*r);

# Driver method

print("Area is %.6f" % findArea(5));

Answer: Enter a number: 12

12 is not an Armstrong number

1. Python program to print all Prime numbers in an Interval

lower = int(input("Enter a number: "))

upper = int(input("Enter a number: "))

print("Prime numbers between", lower, "and", upper, "are:")

for num in range(lower, upper + 1):

   # all prime numbers are greater than 1

   if num > 1:

       for i in range(2, num):

           if (num % i) == 0:

               break

       else:

           print(num)

Answer:

Enter a number: 900

Enter a number: 1000

Prime numbers between 900 and 1000 are:

907

911

919

929

937

941

947

953

967

971

977

983

991

997

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

num = int(input("Enter a number: "))

# If given number is greater than 1

if num > 1:

    # Iterate from 2 to n / 2

    for i in range(2, int(num/2)+1):

        # If num is divisible by any number between

        # 2 and n / 2, it is not prime

        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")

Answer:

Enter a number: 11

11 is a prime number