1. Write a python program to input two numbers and do all basic arithmetic operations on them.

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

b=int(input("Enter second number"))

print("a+b=",a+b)

print("a-b=",a-b)

print("a\*b=",a\*b)

print("a/b=",a/b)

print("a\*\*b=",a\*\*b)

print("a%b=",a%b)

**output**

Enter a number12

Enter second number4

a+b= 16

a-b= 8

a\*b= 48

a/b= 3.0

a\*\*b= 20736

a%b= 0

a//b= 3

1. Write a python program to input two numbers and swap their values without using any third variable.

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

b=int(input("Enter a number"))

print("Before swapping")

print("value of a=",a,"\nvalue of b= ",b)

a,b=b,a

print("After swapping")

print("value of a=",a,"\nvalue of b= ",b)

**output**

Enter a number5

Enter a number3

Before swapping

value of a= 5

value of b= 3

After swapping

value of a= 3

value of b= 5

1. Write a python program to input the temperature in Fahrenheit and change it to Celsius.

f=int(input("Emter a Temperatur in Fahrenheit "))

c=(5/9)\*(f-32)

print("The tempure in calcius is ",c)

**output**

Emter a Temperatur in Fahrenheit 86

The tempure in calcius is 30.0

1. Write a python program to input the basic salary of a person and compute its TA (20% of basic), DA (120% of basic), HRA (30% of basic), Gross (basic + ta + da + hra).

sal=int(input("Enter the salary"))

ta=sal \* (20/100)

da=sal \* (120/100)

hra= sal \* (30/100)

gross=sal+ta+da+hra

print("The gross salary is ",gross)

**output**

Enter the salary 5000

The gross salary is 13500.0

1. Write a python program to swap three variables.

a=int(input("Emter a number"))

b=int(input("Emter a number"))

c=int(input("Emter a number"))

print("Before swapping")

print("value of a=",a,"\nvalue of b= ",b,"\nvalue of c=",c)

a,b,c=c,b,a

print("After swapping")

print("value of a=",a,"\nvalue of b= ",b,"\nvalue of c=",c)

**output**

Emter a number6

Emter a number7

Emter a number8

Before swapping

value of a= 6

value of b= 7

value of c= 8

After swapping

value of a= 8

value of b= 7

value of c= 6

6. Write a python program to evaluate the expression

4x^4 + 3y^3 -9z + 6

x=int(input("Enter the value of x "))

y=int(input("Enter the value of y "))

z=int(input("Enter the value of z "))

ans= 4\*(x\*\*4) + 3 \*(y\*\*3) - 9\*z +6

print("With x=",x," y=",y ,"and z=",z)

print("T4x^4 + 3y^3 -9z + 6=",ans)

**output**

Enter the value of x 1

Enter the value of y 1

Enter the value of z 1

With x= 1 y= 1 and z= 1

T4x^4 + 3y^3 -9z + 6= 4