

Ex - 8

copy (Alt + Shift + L)

Comparison operators

Exp I/P : 10, 5

Exp O/P : "10 > 5 : True, 10 < 5 : False,
10 == 5 : False, 10 != 5 : True"

Print (10 > 5, 10 < 5, 10 == 5,)

Ex - 91

Formatting output using f-strings

Exp I/P : "Alice", 25

Exp O/P : "Name : Alice, Age : 25 years"

input statements

x, y = input("Enter name and age : ").split(",")

print(f"Name : {x}, Age : {y} years")

Finding the sum of Two Numbers

Sample I/P : num 1 = 5
num 2 = 10

Sample O/P : sum : 15

Processing num 1 + num 2

num 1 = int(input(" "))

num 2 = int(input(" "))

Print ("sum : ", num 1 + num 2, sep = " ")

Print (f"sum : {num 1 + num 2}")

Finding the Area of a circle

Sample Input : radius = 5

Sample output : Area of the circle : 77.5392163397

radius = int (input ("Give Radius : "))

a = 3.14 * (radius ** 2)

Print ("Area of the circle :", a)

Print ("Area of the circle :", a, sep = ", ")

Print (f "Area of the circle : {a}")

Solving Quadratic Equations :

I/P : a = 1

b = -3

c = 2

O/P = Roots : (2.0, 1.0)

$$\left[\begin{array}{l} ax^2 + bx + c = 0 \\ d = b^2 - 4ac \\ \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \end{array} \right]$$

#a, b, c

a = int (input ("Give a : "))

b = int (input ("Give b : "))

c = int (input ("Give c : "))

root 1 = 0

root 2 = 0

d = (b**2) - 4*a*c

root 1 = (-b + (d**(0.5))) / 2*a

root 2 = (-b - (d**(0.5))) / 2*a

Print (f "Roots : ({root 1}, {root 2})")

Swap the values of two variables without using a temporary variables :

I/P : a = 10 , b = 20

O/P : After swapping a = 20 , b = 10

a = int (input ("Give a : "))

b = int (input ("Give b : "))

temp = b

b = a

a = temp

Print ("value of a is : {a}")
Print ("value of b is : {b}")

without using temp?

a = int (input ("Give a : "))

b = int (input ("Give b : "))

b = b + a

a = b - a

b = b - a

Print ("value of a is : {a}")

Print ("value of b is : {b}")

Converting Temperature units :

I/P : temperature — Celsius = 30

O/P : Temperature in Fahrenheit : 86.0

Temperature in Kelvin : 303.15

Formulae

Fahrenheit : $F = C * (9/5) + 32$

Kelvin : $273 + C$

Basic Currency Converter

I/P : amount_in_usd = 100

exchange_rate_usd_to_eur = 0.85

O/P : Equivalent amount in EUR : 85.0