**TASK ONE**

**NUMBERS AND VARIABLES**

**1.** Create three variables in a single line and assign values to them in such a manner that each one of them belongs to a different data type.

print("Assigning values of different datatypes")

a,b,c = 92, "Consultadd", 89.72

print(a)

print(b)

print(c)

OUTPUT:

PS D:\Python> python t1.py

Assigning values of different datatypes

92

Consultadd

89.72

**2.** Create a variable of type complex and swap it with another variable of type integer.

x = eval(input("Enter the value of x: "))

y = eval(input("Enter the value of y: "))

x,y = y,x

print("The value of x after swapping: =", x)

print("The value of y after swapping: =", y)

print(type(x))

print(type(y))

OUTPUT:

PS D:\Python> python t1.py

Enter the value of x: 232

Enter the value of y: 2+4j

The value of x after swapping: = (2+4j)

The value of y after swapping: = 232

<class 'complex'>

<class 'int'>

**3.** Swap two numbers using a third variable and do the same task without using any third variable.

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

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

temp = x

x = y

y = temp

print("The value of x after swapping: ", x)

print("The value of y after swapping: ", y)

OUTPUT:

PS D:\Python> python t1.py

Enter the value of x: 34

Enter the value of y: 699

The value of x after swapping: 699

The value of y after swapping: 34

**4.a.** Write a program that takes input from the user and print it using Python 2.x

#User input for python 2.7

myFirstName = raw\_input("Enter your first name: ")

myLastName = raw\_input("Enter your last name: ")

print myFirstName  , myLastName

OUTPUT:

PS D:\Python> python2 T1.py

Enter your first name: RONAK

Enter your last name: CHANDGADHIA

RONAK CHANDGADHIA

**4.b.** Write a program that takes input from the user and print it using Python 3.x

#User input for python 3.10

myFirstName = input("Enter your first name: ")

myLastName = input("Enter your last name: ")

print("My name is ", myFirstName,myLastName

OUTPUT:

PS D:\Python> python t1.py

Enter your first name: RONAK

Enter your last name: CHANDGADHIA

My name is RONAK CHANDGADHIA

**5.** Write a program to complete the task given below: Ask users to enter any 2 numbers in between 1-10 , add the two numbers and keep the sum in another variable called z. Add 30 to z and store the output in variable result and print result as the final output.

x = int(input("Enter any number between 1 and 10: "))

y = int(input("Enter other number between 1 and 10: "))

z = x+y

result = z+30

print("The final output is: ", result)

OUTPUT:

PS D:\Python> python t1.py

Enter any number between 1 and 10: 4

Enter other number between 1 and 10: 6

The final output is: 40

**6.** Write a program to check the data type of the entered values.

HINT: Printed output should say - The data type of the input value is : int/float/string/etc.

x = eval(input("Enter any value of your choice: "))

print("The data type of the input value is: ", type(x))

OUTPUT:

PS D:\Python> python t1.py

Enter any value of your choice: 2+3j

The data type of the input value is: <class 'complex'>

**7.** Create Variables using formats such as Upper CamelCase, Lower CamelCase, SnakeCase and UPPERCASE.

MyFirstVariable = "MyFirstVariable"     #Upper CamelCase

myFirstVariable = "myFirstVariable"     #Lower CamelCase

my\_first\_variable = "my\_first\_variable" #SnakeCase

MYFIRSTVARIABLE = "MYFIRSTVARIABLE"     #UPPERCASE

**8.** If one data type value is assigned to ‘a’ variable and then a different data type value is assigned to ‘a’ again. Will it change the value? If Yes then Why?

Yes, variables in Python can be reassigned to a new value that is a different data type from its current value. In fact, variables can be reassigned to any valid value in Python, regardless of its current value.

Variables are essentially like an empty box, that can contain something like a string, number, or other value. When you assign it a value, the box will contain that value, and when you reassign it, it will empty out the old value, and the new value will be placed inside of it. Therefore Python is known as a dynamically typed programming language.

# This variable is initially assigned as a string.

x = 'Consultadd'

print(x)

# It can be reassigned to any other value, regardless of the type.

x = 25

print(x)

OUTPUT:

PS D:\Python> python t1.py

Consultadd

25

**END OF TASK ONE**