Training Day- 6

Data Types: Are used to save or represent different types of values.

Single Element/Single Valued: In Python, single element or single-valued structures or variables refer to data that contains exactly one item or value int: Whole number: 2000, -80 float: Decimal point numbers: 5.0, 2.35 complex: complex numbers: real + imaginary: 2+3j bool: True, False

NoneType: None

Multi Element/Multi Valued/ Iterators: len function can work only on iterators str: single, double or triple quotes list

tuple dict set frozenset

Variables: Whose value vary in the program. Variables are data

storing elements: Variables are stored in RAM: RAM is a volatile memory. We can store the values in variables

EXAMPLE

x=5 #x is a variable of int type x=2+3j #x is a variable of complex type x=True #x bool type Possible arguments in print:

print(values, variables, expressions, conditions, functions, classes)

…………..New Program…………..

# print(2000)

# print(2.5)

# print("CETPA")

…………..New Program…………..

# x="x"

# print(x,"x")

How Variables Are Created In Python: By assigning the values x=5 #x int type variable x="cetpa" #x str type variable

…………..New Program…………..

# x=y #NameError: name 'y' is not defined

# print(x)

…………..New Program…………..

# true=5

# print(true)

…………..New Program…………..

# 7=5 #SyntaxError:

…………..New Program…………..

# True=5 #SyntaxError: cannot assign to True

# print(True)

…………..New Program…………..

# x=true

# print(x)

…………..New Program…………..

# name="tiger"

# print("Name:",name)

"""

Possible arguments in print:

print(values, variables, expressions, conditions, functions, classes)

"""

…………..New Program…………..

# a,b=3,4

# s="CETPA"

# print(23,True,a,s,a+b,a>b,len(s),type(s))

…………..New Program…………..

# s="Welcome to company"

# print(len(s))

…………..New Program…………..

# x=2+3j

# print(type(x))

# print(x)

…………..New Program…………..

# x="CETPA"

# print(type(x))

# print(x)

STRINGS:

Single Line String: Single quote, double quotes or triple quotes

Multi Line String: Only triple quotes are allowed to make the strings

# x='Welcome to CETPA'

# print(x)

# x="Welcome to CETPA"

# print(x)

# x='''Welcome to CETPA'''

# print(x)

# x="""Welcome to CETPA"""

# print(x)

How To Take The Data From The User Or From The Screen:

We have a Radymade function: input ( )

Syntax:

input("Message for user") var=input("Message for user")

…………..New Program…………..

# x=input("Enter Your Name:")

# print(x)

…………..New Program…………..

# x=input("What are you doing?")

# print(x)

# #New Program: future concept

# x=input("Enter 5 numbers: ").split()

# print(x)

# print(len(x))

input function always returns str type data in our program

"""

# x="5"

# print(x)

# #New Program

# x=input("Enter Your Name:")

# print(x,type(x))

# x=input("Enter Any Number:") #x="1000"

# print(x,type(x))

…………..New Program…………..

Incorrect addition

# a=input("Enter First No:") #a=5

# b=input("Enter Second No:") #b=7

# s=a+b

# print(s)

…………..New Program…………..

Incorrect addition

# a=input("Enter First No:") #a="5"

# b=input("Enter Second No:") #b="7"

# s=a+b #s="57" # print(s)