**Python Strings**

1.Use the len method to print the length of the string.A=’Data Analytics’

a='Data Analytics'

print(len(a))

**output:** 14

2.Get the first character of the string txt=’Data Analytics’

txt="Data Analytics"

print(txt[0])

**output:** D

3.Get the characters from index 2 to index 4 of txt=’Data Analytics’

txt="Data Analytics"

print(txt[2:4])

**output:** ta

4.Replace the character F with a J for ‘Functions’

a="fruits"

print(a.replace('f','j'))

**output**: jruits

5.Write a Python program to create two strings s1 and s2. Assign in s1 as ‘Python’ and in s2 as ‘Strings. Print the character from 2nd index to 5th index of s1. Print the characters from 2nd to end. Concatenate both s1 and s2. Repeat s2 three times.

s1="python"

s2="strings"

print(s1[2:5]) **output:** tho

print(s2[2:]) rings

print(s1+ " "+ s2) python strings

print((s2+" ")\*3) strings strings strings

# Defining strings in Python# All of the following are equivalent

my\_string = 'Hello'print(my\_string)my\_string = "Hello"print(my\_string)my\_string = '''Hello'''print(my\_string)

**output:** Hello

Hello

Hello

# Triple quotes string can extend multiple lines

my\_string = """Hello, welcome to the world of Python"""

print(my\_string)

**output:** Hello, welcome to the world of Python

#Accessing string characters in Python

str = 'programiz'print('str = ', str)#first characterprint('str[0] = ', str[0])#last characterprint('str[-1] = ', str[-1])#slicing 2nd to 5th characterprint('str[1:5] = ', str[1:5])#slicing 6th to 2nd last character

print('str[5:-2] = ', str[5:-2])

**Output:** str = programiz

str[0] = p

str[-1] = z

str[1:5] = rogr str[5:-2] = am

# Python String Operations

str1 = 'Hello'

str2 ='World!'

# using +

print('str1 + str2 = ', str1 + str2)

# using \*

print('str1 \* 3 =', str1 \* 3)

output: str1 + str2 = HelloWorld!

str1 \* 3 = HelloHelloHello

name="Devansh" **output:** Devansh

age=20 20

marks=80.50 80.50

print(name)

print(age)

print(marks)

name="A"

Name="B"

naMe="C"

NAME="D"

n\_a\_m\_e="E"

\_name="F"

name\_="G"

\_name\_="H"

na56me="I"

print(name,Name,naMe,NAME,n\_a\_m\_e,NAME,n\_a\_m\_e,\_name,name\_,\_name\_,na56me)

**output:** A B C D E F G H I

x=y=z=50

print(x)

print(y)

print(z)

**output:** 50 50 50

a,b,c=5,10,15 **output:** 5

print(a) 10

print(b) 15

print(c)

a=10000000000000000000000000000000000000000000

a=a+1

print(type(a))

print(a)

**output:** <class 'int'>

10000000000000000000000000000000000000000001

a=10 **output:** <class 'int'>

b="Hi Python" <class 'str'>

c=10.5 <class 'float'>

print(type(a))

print(type(b))

print(type(c))

a=5

print("The type of a",type(a))

b=40.5

print("The type of b",type(b))

c=1+3j

print("The type of c",type(c))

print("c is a complex number",isinstance(1+3j,complex))

**output:** The type of a <class 'int'>

The type of b <class 'float'>

The type of c <class 'complex'>

c is a complex number True

website = "apple.com"

print(website)

# assigning a new value to website

website = "programiz.com"

print(website)

**output:** apple.com

programiz.com

#string str1 **output:** Da

str1='Data' a

#string str2 DataData

str2='Analytics' DataAnalytics

#printing first two character using slice operator

print(str1[0:2])

#printing 4th character of the string

print(str1[3:])

#printing the string twice

print(str1\*2)

#printing the concatenation of str1 and str2

print(str1+str2)

a = 0b1010 #Binary Literals

b = 100 #Decimal Literal

c = 0o310 #Octal Literal

d = 0x12c #Hexadecimal Literal

#Float Literal

float\_1 = 10.5

float\_2 = 1.5e2

#Complex Literal

x = 3.14j

print(a, b, c, d)

print(float\_1, float\_2)

print(x, x.imag, x.real)

**output:** 10 100 200 300

10.5 150.0

3.14j 3.14 0.0