**Python Assignment 1**

1. Create following variables in Python and print the type of each variable and explain if you face any errors
   1. a = 23
   2. var1 = 12.9
   3. var2 = ‘hello’
   4. var3 = “I’m Good”
   5. 5 = ‘python’

A: option e is not executable, as we cannot assign string literals to a number

1. Write a program to take following user inputs using input() function, print it’s type to stdout and explain if you face any errors
   1. 256
   2. 2 + 3j
   3. Hello World
   4. ‘Hello World’

A: All are executable

1. Repeat problem (2) using raw\_input() function

Ans :

1. Write a program which takes 100, 256, ‘Hello’, ‘World’ inputs using input() function and print the following:
   1. Output of 100 + 256 using print statement
   2. Print Hello World using print statement (There is a space between Hello and World)
   3. Print HelloWorld using print statement (There is no space between Hello and World)
   4. Concatenate 100 and ‘Hello’ and explain the output
2. Repeat problem (4) using raw\_input() function

For both 4th and 5th questions, code :

a = input("a")

b = input("b")

c = input("c")

d = input("d")

print(eval(a)+eval(b))

print(c+" "+d)

print(c+d)

print(a+c)

1. Write a program which accepts user input and then prints whether it is even or odd integer

A :

b = eval(input('a'))

if (b%2)==0 :

print ("Even")

else:

print("Odd")

1. Write a program which takes user input and then does following:
   1. If value is greater than 0 then print ‘positive’
   2. If value is less than 0 then print ‘negative’
   3. If value is equal to 0 then print ‘zero’
   4. Else print ‘Error’

Ans :

b = eval(input('p'))

if b>0 :

print ("Positive")

elif b<0:

print("Negative")

elif b==0:

print ("Zero")

else:

print("Error")

1. Write a program to do the following:
   1. Create an empty string and print it to stdout
   2. Create a string variable and pass ‘pseudonymous’ using input()
   3. Print the length of value passed in (b)
   4. Iterate through the string created in (b) and print character and its corresponding index number onto stdout (like p, index is 0 – s, index is 1 etc.,)

Ans:

1. What is slicing and membership in strings. Explain with examples

**Slicing-**The slice object is used to slice a given sequence (string, bytes, tuple, list or range) or any object which supports sequence protocol

slice() returns a slice object used to slice a sequence in the given indices.

**Example:**

Values = [500, 600, 300, 200]

# Slice from start to second index

Slice= Values[:2]

Print(slice)

Output:-

[500, 600]