# Python String Indexing and Slicing Assignment(4-07-25)

1. **What is a string in Python?**

Strings are a sequence of characters. A character can be a number, letter, special character, etc. A string can contain spaces and there is no limit on how many characters it should contain.It is indicated between single and double quotes.

1. **What is indexing in a string?**

A string index is a position of a character in a string. In Python, indexing starts at 0. The first character has an index of 0, the second has an index of 1, and so on. For example, in the string "Hello", the character 'H' is at index 0, 'e' at index 1, and so on

1. **Given text = 'hello', what is text[0]?** 
   1. **What will be the output of text[4]?**
   2. **What does text[-1] give?**

In the text hello, text[0]=H

a) The output of text[4] is =o

b)The text [-1]=0

1. **If name = 'Ajay', what is the value of name[0] + name[3]?**

**What happens if you try name[10]?**

the value of name[0] + name[3] gives you

Output=Ay

if you try name[10]

Output=”string index out of range”

1. **Given s = 'Python', what is s[0:2]?** 
   1. **What does s[5:1] return?**

Output:’Py’

1. Empty string
2. **Predict the output for string s = 'Python' . If the code is print(s[2: -1 :2])**

Output:’ to’

1. **Write code to print the last 3 letters of 'elephant'.**

Str1=elephant

> printt(len(srt1)-3)

Output:ant

1. **How to get only the middle 3 letters from 'Science'?**

Str1=’science’

>print(2:5)

Output:ien

1. **What is the difference between s[2:5] and s[2:5:1]?**

There is no difference between s[2:5] and s[2:5:1]

For example : str1(python)

>Print(2:5)

Output:tho

>Print(2:5:1)

Output:tho