Python String Indexing and Slicing Practice

1. What is a string in Python?

Ans: string in Python is a sequence of characters enclosed within single quotes (' '), double quotes (" "), They are used to store and represent text data

Ex: Str(“apple”)

1. What is indexing in a string?

Ans: Indexing is the process of accessing individual characters within a string by their position, known as the index

Ex: Str=”apple” Str(len[2])

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

Ans: str="apple"

print(str[0])

print(str[4])

print(strt[-1]) output: a,l,e

1. If name = 'Ajay', what is the value of name[0] + name[3]?
   1. What happens if you try name[10]?

Ans: name=”ajay” name[0]+name[3]=Ay

Index out of range error

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

Ans : s=”python” s[0:2]=py

S[5:1]

Empty string

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

print(s[2: -1 :2]) output: to

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

Ans : name=”elephant” print(name [5:8]) output: ant

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

Ans: name=”Science” print(name [4:7]) output: nce

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

Ans. In Python, s[2:5] and s[2:5:1] both slice a string s, but the second form explicitly specifies a step of 1. When no step is given, as in s[2:5], the default step of 1 is

assumed. Therefore, there is no difference in the outcome .both will return the same substring consisting of the characters at indices 2, 3, and 4.