

Class: XII

Subject: Computer Science

TOPIC : PYTHON REVISION TOUR-I

Q.1 Find the output of the following:-

- (a)

```
S = """One
Two
Three"""
print(len(S))
```
- (b)

```
S = "One\
Two\
Three"
print(len(S))
```
- (c)

```
L=["Mon","Tue","Wed"]
for i in L:
    i=i+"*"
    print(i,end=":")
    print(L)
```
- (d)

```
sum=0
for i in range(10,1,1):
    sum+=a
print(sum)
```
- (e)

```
L=[20,18,16,14,10]
for a in range(len(L)):
    if a%2==0:
        L[a]+=3
        print(a)
    else:
        print(L)
```
- (f)

```
p="PINEAPPLE"
i='P'
while i in p:
    print(i,end='*')
```
- (g)

```
d={(1,2):10,(2,3):20,(3,4):30}
s=0
for i in d:
    s+=d[i]
    c=sum(i)
    print(c,"#",s)
```

Q.2 Answer the following questions:-

- a) How is a mutable datatype different from immutable datatype?
- b) The else clause can be used both in if statement and loop statement. When is it used in each of those statements?
- c) What are escape sequences in python? List few examples.
- d) Discuss the use of **break** and **continue** keyword.
- e) List the mandatory features for keys of dictionary.
- f) What is the difference between pop(), remove(), del() and clear() of list?

Q.3 Programs in Python:-

- (a) WAP to enter cost price and selling price of an item and check whether there is profit or loss. Calculate the percent of each and display.
- (b) WAP to enter a number and print Fibonacci series up to that term.
- (c) WAP to enter a string and count the total number of uppercase, lowercase, digits and special characters from it.
- (d) WAP to enter a list of numbers and arrange them in increasing order using Insertion sort method.
- (e) WAP to enter a list of words and print the word with maximum length.
- (f) WAP to enter a list of words and modify the list in such a way that each element consist only the first and last character.
Ex : L = ["peter", "nayanika", "sourav", "amit"]
Then after program L = ["pr", "na", "sv", "at"]
- (g) WAP to enter a nested tuple of numbers and calculate the sum of each nested element. Ex :
T = ((10,15,20), (2,1), (5,3,7))
Then output should be
Sum1 = 45
Sum2 = 3
Sum3 = 15
- (h) WAP to enter a dictionary having month name as keys and number of days as its value. Print only those month names where number of days are 31.
- (i) WAP to enter a list of words and create a dictionary with those words as keys and the number of vowels it it as key.
Ex : L = ["First", "Second", "Third", "Fourth", "Fifth"]
Then D = {"First": 1, "Second": 2, "Third": 1, "Fourth": 2, "Fifth": 1}

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