**FYBCA**

**SEMESTER – I**

**BCA1111C03: Introduction to Programming using Python**

**Date : 12/09/2022**

**Instructions:**

         Properly name your variables.

         Use comments wherever required

         Write problem objective with the necessary details in the beginning of each program.

1. Perform the following on the given string and interpret the output by writing a comment.

Program performing slice operation on strings

str= ‘Python is Easy !!!’

print(str)

print(str[0])

print(str[: :-1])

print(str[:])

print(str[-3])

print(str[3: 9])

print(str[ : 5])

print(str[0:])

print(str\*2)

print(str+ “Isn’t it”)

print(str[0:])

str[3]=’X’

print(str)

1. Print the following:

**Ram’s wife is Sita** in single quote

**Ram is also known as “Maryada Purushottam”** in double quote

Note: Use Escape character and then try with r or R to ignore Escape Character.

1. Check output of following program:

age = 36  
txt = "My name is Rahul, and I am {}"  
print(txt.format(age))

1. Create a tuple of Freedom Fighters of India.

Perform the following operations on the Tuple defined:

print(Tup)

print(Tup[0])

print(Tup[1:3])

print(Tup[2:])

print(Tup \* 2)

print(Tup + Tup2) **#Concatenating two tuples**

1. Check output of the following program:

quantity = 3

itemno = 567  
price = 49.95  
myorder = "I want {} pieces of item {} for {} dollars"  
print(myorder.format(quantity, itemno, price))

1. Check output of the following program:

quantity = 3  
itemno = 567  
price = 49.95  
myorder = "I want to pay {2} dollars for {0} pieces of item {1}"  
print(myorder.format(quantity, itemno, price))

Note: Check output by changing the order of arguments in format() like this

myorder.format(itemno,price,quantity)

1. Create a list of items

Perform the following operations on the list(List Slicing):

print(list)

print(list[0])

print(list[1:3])

print(list[2:])

print(list[:])

print(list \* 2)

print(list + list2) **#Concatenates two lists**

**Apply the following list methods on your defined list and observe the output:**

#Add one item to a list using append() function

list.append(18)

print(list)

#Add several items to the list using extend() function

list.extend([“UPSC”,”SSC”,”HSC”])

print(list)

#Changing 2nd to 4th items in the list

list[1:4]=[15,89,78]

print(list)

#Using insert() function

Example:

list=[1,9]

list.insert(1,3)

print(list)

list[2:2]=[5,7]

print(list)

#Deleting the entire list

del list

print(list) #**Error would be generated because it no more exists**

#Removing a given item from the list

list=[‘p’,’q’,’r’,’s’,’m’]

list.remove(‘p’)

print(list)

#Pop() method is used to remove an item at the given index

list.pop(1) #Removes the item at the given index

list.pop() #Removes the last item if the index is not provided

#Clear() method to empty the whole list

list.clear()

print(list)

#index() method : returns the index of the first matched item/first occurence

list=[7,8,12,15,96]

list.index(8) #Output: 1

#sort() method : sort items in a list in ascending order

list=[12,44,85,96,25,36]

print(List.sort())

#reverse() method : reverse the order of items in the list

print(list.reverse())