**FYBCA**

**SEMESTER – I**

**CAM2011C : Introduction to Programming with Python**

**Date : 31/07/2024**

 **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 acomment

str= ‘ Python is a high-level, interpreted, interactive, and object-**oriented**programming language.’

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[6]=’#’;

print(str)

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

Tup1 = (‘a’, ‘bc’, 78, 1.23, ‘Python’,  3.14,  8977)

Tup2 = (‘d’, 45)

print(Tup1)

print(Tup1[0])

print(Tup1[2])

print(Tup1[1:3])

print(Tup1[2:])

print(Tup1[-2])

print(Tup1\*2)

print(Tup1 + Tup2)

Tup1[0]= ‘z’;

print(Tup1)

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

Lst1= [‘a’, ‘bc’, 78, 1.23, ‘Bollywood’, ‘Vadodara’, 390002]

Lst2= [‘d’, 92782]

print(Lst1)

print(Lst1[0])

print(Lst1[1:3])

print(Lst1[-5])

print(Lst1[:3])

print(Lst1[1:])

print(Lst1\*2)

print(Lst1+Lst2)

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

Dict1= {“Item”: “Chocolate”, “Price”: 50.00}

print(Dict1[“Price”])

print(Dict1[“Item”])

Find the types of str, Tup1, Lst1, Dict1

1. Write a program to convert a number into octal, hexa and binary using oct(). hex)( and bin() functions
2. Write a program to display even nos. till 100 [Hint: Use range()]]
3. Write a program to display odd nos. till 100 [Hint: Use range()]
4. Python Program to Convert Kilometers to Miles and vice versa [Hint: mi =km \* 0.62137 ]
5. Python Program to Calculate the Area of a Triangle [Hint: area= sqrt(s (s-a) (s-b) (s-c) where s= a+b+c/2 and a, b, c are sides of traingle)]
6. Create a list of programming language.
7. Create a tuple of heterogeneous data items.
8. Create a list of homogeneous data items.
9. Write a program to reverse a string.
10. Write a program to convert

 Inches to cm[Hint : cm =in / 0.39370

Inches to Feet [Hint : ft =in \* 0.083333

1. Write a program to input first name, middle name and surname in a single line by single input function separated by ‘,’.  [Hint : use format()] And greet the user as

Hello Mr. <surname>, Your Given name is <First Name>  and middle name is <middlename>

1. Write a program to input name, class and marks in five subjects of a student in single input() and print the percentage of the student.
2. Write a program to check whether a person is eligible for vote or not.
3. Write a program to find the larger of three nos.