Assignment -3

1.Write a program to show usage of class and object.

>>>Class Rainbow:

… Colors=7

…

>>>print(Rainbow.colors)

>>>7

2. Write a program to show usage of inheritance.

>>>Class Person: #parent

… def \_\_init\_\_(self,first,last):

… self.firstname=first

… self.lastname=last

… def Name(self):

… return self.firstname+” “+self.lastname

…

>>>Class Student(Person): #child

… def \_\_init\_\_(self,first,last,studid):

… Person.\_\_init\_\_(self,first,last)

… self.studentid=studid

… def GetStudent(self):

… return self.Name() + “ ,”+delf.studentid

…x=Person(“siva”,”reddy”)

…y=Student(“gopi”,”reddy”,”1245”)

…

>>>print(x.Name())

**siva reddy**

>>>print(y.GetStudent())

**gopi reddy,1245**

**4.** **Write a program to show usage of constructor.**

>>>Class Person:

… def \_\_init\_\_(self,first,last):

… self.firstname=first

… self.lastname=last

… def Name(self):

… return self.firstname+” “+self.lastname

… x=Person(“siva”,”reddy”)

…

>>>print(x.Name())

**siva reddy**

5. Write a program to find greatest element from list.

>>>list=[1,3,6,9]

>>>max(list)

**9**

**6. Write a program to find all numbers divisible by 5 between (2000 and 3000)**

**and insert those elements in a list and then print them.**

**>>>**list=[]

>>>for x in range(2000,3000):

… if x%5==0:

… list.append(str(x))

…

>>>print (list)

[2000,2005,2010,……………………..,3000]

7. Write a python script which has class having two below methods and access

those methods in another class:

a. getString : get a string from console input

b. printString : to print the string in upper case

>>>class String():

… def \_\_init\_\_(self):

… self.str=” ”

… def get\_string(self):

… self.str=input()

… def print\_string(self):

… print(self.str.upper())

…str=string()

…str.get\_string()

…str.print\_string()

…

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**Naveej**

**8. What will be the output of following code :**

**>>>word = 'abcdefghij'**

**>>>print word[:3] + word[3:]**

Abcdefghij

**9 Write a program to sort the following intergers in list.**

>>> list=[1,3,45,7,54]

>>>list.sort()

>>>print(list)

[1,3,7,45,54]

Assignment-4

1. Write a Python script to check if a given key already exists in a dictionary.

>>>d={‘a’:1,’b’:2,’c’:3}

>>>if a in d:

… print(“exist already”)

…else:

… print(”not exist”)

…

Exist already

1. Write a Python program to iterate over dictionaries using for loops.

>>>d={‘a’:1,’b’:2,’c’:3}

>>>for key,value in d.items():

… print(key,’belongs to’,d[key])

…

a belongs to 1

b belongs to 2

c belongs to 3

1. Write a Python script to merge two Python dictionaries.

>>>d1={‘a’:1,’b’:2}

>>>d2={‘c’:3,’d’:4}

>>>d=d1.copy()

>>>d.update(d2)

>>>print(d)

{‘a’:1,’b’:2,’c’:3,’d’:4,}

1. Write a Python program to multiplies all the items in a list.

>>>from functions import reduce

>>>list=[1,4,5]

>>>res=reduce((lambda x,y:x+y),list)

>>>print(res)

20

1. Write a Python program to remove duplicates from a list.

>>>a=[2,3,4,2,3,6,5]

>>>a=set(a)

>>>print(a)

[2,3,4,5,6]

1. Write a Python class to implement pow(x, n).

7.Write a Python class named Circle constructed by a radius and two methods which will compute the area and the perimeter of a circle.

>>>class circle():

… def \_\_init\_\_(self,r):

… self.radius=r

… def area(self):

… print(“area:”,self.radius\*\*2\*3.14)

… def perimeter(self):

… print(“perimeter”,self.radius\*2\*3.14)

…res=circle(4)

…res.area()

…res.perimeter()

…

Area:50.24

Perimeter:25.12

8.Write a Python program to display the first and last colors from the following list.

>>>list=[“red”,”black”,”blue”,”green”]

>>>print(list[0],list[-1])

Red,green

9. Write a Python program that accepts a word from the user and reverse it

>>>s=input(“enter a string:”)

Enter a string:gopi

>>>print(s[::-1])

**ipog**