LAB ASSIGNMENT

(1)

def fun():

print(“this is the fun() function.”)

def disp():

print(“this is the disp() function.”)

def msg():

print(“this is the msg() function.”)

functions = [fun, disp, msg]

for func in functions:

func()

output:

this is the fun() function.

this is the disp() function.

this is the msg() function.

(2)

list1 = [1, 2, 3, 4, 5, 6]

list2 = [6, 5, 4, 3, 2, 1]

result = [x + y for x, y in zip(list1, list2)]

print(“resulting list:”, result)

output:

resulting list: [7, 7, 7, 7, 7, 7]

(3)

import random

random\_numbers = random.sample(range(-15, 16), 10)

squared\_numbers = [num \*\* 2 for num in random\_numbers]

print(“random numbers:”, random\_numbers)

print(“squared numbers:”, squared\_numbers)

output:

random numbers: [-12, -5, 3, 7, -10, 2, 14, -8, 9, 4]

squared numbers: [144, 25, 9, 49, 100, 4, 196, 64, 81, 16]

(4)

lst = [‘madam’, ‘python’, ‘malayalam’, 12321]

def is\_palindrome(item):

item\_str = str(item)

return item\_str == item\_str[::-1]

palindromes = [item for item in lst if is\_palindrome(item)]

print(“palindromes in the list:”, palindromes)

output:

palindromes in the list: [‘madam’, ‘malayalam’, 12321]