Python Assignments

NSEC, Industrial Training CSE 3rd Year

Day1

1. Write a Python program which would input a string from keyboard and check whether the string is palindrome or not.
2. Input two strings (str1, str2) from KBD

Check whether str2 lies in str1

1. Write a program that asks the user to enter a length in centimeters. If the user enters a negative

length, the program should tell the user that the entry is invalid by using ‘assert’ Otherwise, the program should convert the length to inches and print out the result. There are 2.54 centimeters in an inch. Add proper exceptions like ValueError, AssertionError etc.

1. Write a program that asks the user to enter a string. The program should then print the

following:

(a) The total number of characters in the string

(b) The first character of the string

(c) The first three characters of the string

(d) The last three characters of the string

(e) The string backwards

(f) The string in all caps

(g) The string with every ‘a’ replaced with an ‘e’

1. Write a Python program that accepts an integer (n) and computes the value of n+nn+nnn. Add proper exceptions

Hint: Sample value of n is 4.

Expected Result: 492

1. Create a list using even numbers within range from 1 to 20 and then create a new list containing the cubes of these using lambda with map.
2. Write a Python Tkinter program which would input centigrade temp using Entry field and then print the Fahrenheit temp which should be displayed using Label object.

Program should have proper Exceptions like ValueError, AsserttionError etc as applicable.

There should be three buttons one for calculate, one for reset and one for close/quit the application

Day 2

1. Write a Python tkinter program to compute the future value of a specified principal amount, rate of interest, and a number of years.

There should be 3 Entry fields for input three variables and one Label field to display the future value. Program should have proper exceptions like ValueError, AssertionError etc to validate the inputs. Program needs to display 3 buttons – as “Calculate”, “Reset” and “Exit”.

Hint: future\_value = amount\*((1+(0.01\*interest)) \*\* years)

1. Quadratic function calculator. Plot a graph of a quadratic eq y=x\*\*2 + 2\*x + 1
2. Write a Python program which would read a CSV file called “sample.csv” and display the contents in a tkintertable format