# CS 115 - Introduction to Programming in Python

# Lab Guide 01A

**Lab Objectives:** Data, expressions, conditional statements

1. Write a program that inputs  a value for x and outputs the value of y according to the given function:

y = x3 + 3⏐x⏐+ 9

x2

**Sample Run:**

Input x: 2

The result of the expression: 5.75

1. Write a program that inputs an integer value from the user. Your program should give an appropriate message for positive even values, positive odd values, zero and negative values.

**Sample Run 1:**

Enter an integer number: -5

Number is not positive

Enter an integer number: 4

Value even and positive

Enter an integer number: 3

Value odd and positive

Enter an integer number: 0

Number is zero

1. Write a program to prepare a menu for a restaurant customer. The customer will input their budget, and the program will compute their bill based on the following. The customer must order a main dish (15TL). If they have money remaining, a starter, dessert or both will be added to their menu, depending on the remaining budget.

The program will display the final bill, as well as their remaining budget.

**Sample Run:**

Enter budget: 24

Main dish added.

Budget not sufficient for starter...

Dessert added.

Total Meal Cost: 23 Remaining Budget: 1

**Sample Run:**

Enter budget: 50

Main dish added.

Starter added.

Dessert added.

Total Meal Cost: 33 Remaining Budget: 17

**Sample Run:**

Enter budget: 12

More money needed