Lab's Scope:

- **Functions Part 1**

Problem 1:

Write a program having a function to convert a value sent to it from Egyptian pounds to dollars assuming that 1 dollar = 45.4 Egyptian pounds.

Problem 2 :

Write a program having a function called "getInput" that asks the student to enter his full name and his ID and prints them out. Your main application should only call the function.

Problem 3:

Write a program having functions to check whether a number is odd or even.

Write two functions:

a) one that prints whether a number is even or odd from inside the function.
b) The second function returns true if the number is even, and false if the number is odd, and the printing occurs from the main.

Problem 4:

Write a program having a function that is sent the user's age in years and prints out his age in days assuming that all years are 365 days.

Problem 5:

Write a function that takes the start and end of a range of number and return the sum of all the numbers within that range to be printed by the main application.

Example:

If the start is 30 and the end is 45, then the sum = 30+31+32+…+45 = 600

Problem 6:

Write a function that takes a letter as a parameter and returns true if it is a vowel and false if it is a consonant. Assume that the user always enters a valid letter from the English alphabet.

Problem 7:

Write a program having a function that takes a string as a parameter and the reverse of the string to be printed by the main application.
Example:
Enter a string:
hello everybody
ydobyreve olleh

Problem 8:

Write a program having a function that given a word as a string, it checks whether this string is Palindrome or not. The function should return true if the string is Palindrome and false otherwise. Assume the user inputs all words in lowercase letters.
Palindromes in English are strings where the characters read the same backward as forward.

Examples are: civic, radar, level, madam

Problem 9:

Write a program having two functions, the first one is called "getInput" which takes input from the user representing the name of an Employee, his national id, and his position (the position could be "manager", "staff", or "admin"). This function should send the employee's position to another function called "setSalary" to return the salary of the employee based on his position where a manager's salary is 100,000, staff salary is 50,000, and admin's salary is 40,000. Function "getInput" should then print all the information of the Employee.

The function headers should be as follows:

a) void getInput()
b) int setSalary (string position)

Problem 10:

An absolute value is the non-negative value of a number without regard to its sign (i.e. a positive value remains positive, and a negative value should be converted to its positive form).
Write a program having functions that print out the absolute value of a number sent to it. You should have a function that accepts an integer value, and another one that accepts a double value. Both functions should be called "absolute".