In this lab, you will learn to write modular code using functions in C.

The basic objectives are:

(1) Understand the basic instructions in C.

(2) Think of ways to implement a given problem in C using functions.

(3) Get familiar with your IDE.

Task 1: Write a C program which has implementations of min, max and average as separate functions. Use main method to invoke these functions for the numbers 9,1,4,5,6 and 11.

Input: None.
Output: Min = 1. Max = 11. Avg = 6.

Task 2: What is the output of the following program? Understand the program behavior.

```
#include <stdio.h>
char A()
{
    char c = 'B';
    return c;
}

int main()
{
    printf("%d", sizeof(A()));
    return 0;
}
```

Modify the above program as follows:

```
 #include <stdio.h>
int A()
{
    char a = 'A';
    char b = 'B';
    return (int) a + b;
}
int main()
{
    printf("%d", sizeof(A()));
    return 0;
}
```

Is there any change in the output? What does sizeof() do?

Task 3: You and your friend decided to play a game. You will roll a dice first. You see any number between 1 and 6 as a result of rolling the dice. One who gets the larger number wins.

Task 4: Just rolling the dice once and deciding the winner does not sound good to you. You want to repeat the game 100 times. Whoever wins the most games is declared the winner. Remember, there could be a draw as well both in individual game as well as when playing it 100 times. Print the output as in the following example: Player1 wins 140 times. Player2 wins 100 times. Drawn 60 times.