

## Lab 2: Number Guessing Game with Functions, Loops, and Conditionals

### Instructions:

In this lab, you will develop a number-guessing game. The game will use **functions** to organize the code, loops to allow the user multiple attempts, and **conditional statements** to provide feedback. The user will have **3 chances** to guess a randomly generated number between **1 and 10**. **File should be named (Lab2.c)**

### Goals:

By the end of this lab, you should be able to:

1. Write and call functions in C to organize your code.
2. Use loops to repeat tasks (e.g., asking the user to guess).
3. Use conditional statements (if, else if, else) to provide feedback based on user input.
4. Generate a random number using the C standard library.

### Sample Output:

```
Guess the number (between 1 and 10). You have 3 attempts.  
Enter your guess: 8  
Too high! Try again.  
Enter your guess: 5  
Too low! Try again.  
Enter your guess: 6  
Congratulations! You guessed the number.
```

```
Guess the number (between 1 and 10). You have 3 attempts.  
Enter your guess: 1  
Too low! Try again.  
Enter your guess: 2  
Too low! Try again.  
Enter your guess: 9  
Too low! Try again.  
Sorry, you've used all your attempts. The number was: 10
```

### Grading Criteria:

Grading Criteria

1. Program executes and achieves desired output: 100 points
2. Calculation errors: -5 points each
3. Compilation errors: -10 to -20 points (based on severity)
4. Lack of indentation or poor formatting: -5 points
5. Input handling errors: -10 points