1. Goal

The goal of this assignment is to write two Python programs to play two versions of the guessing game.

1.1. Game 1: A Guessing Game

Write a Python program to play the guessing game where a user enters a number and the program tells the user either that they got it right (ending the game), guessed too high, or guessed too low.

Your program will include a while loop where the condition is true if the current guess is not equal to the correct number. Inside the loop you need to decide if the user’s guess is too high or too low and print an appropriate message. Don’t forget to initialize the variables used in the condition of the while loop before executing the loop for the first time.

1.2. A Backwards Guessing Game

Write a program to play the guessing game where the program guesses a number and the user tells the program if it got it right (ending the game), guessed too high, or guessed too low.

This is the guessing game with a twist. In some sense, you will play the role of the computer, and the computer will try to guess your number. You will first think of a number (you don’t have to read it in as input). Then have a loop where on each iteration the computer guesses a number and you tell it if it is correct, too high, or too low. If it is not correct, the computer should adjust its current guessing range and loop around to guess again. If it is correct, the computer will print out a happy message and exit.

Sample Output (user-typed information is **bold**)

Time to play Guessing Game!
I think the number is 27.
How’d I do?
**Low**
I think the number is 92.
How’d I do?
**High**
I think the number is 58.
How’d I do?
**Correct**
Well done!

What to hand in

(1) Upload to Moodle under Assignment 3 your two .py files for the two guessing games.

Notes

(2) All numbers are are in the range 1 to 100.

(3) All your Python programs should start with

```
# This is my code (not stuff copied from a friend or the internet)
# <Your Name>
# CS111.11
```