

Python Programming – The Higher Or Lower Game

Objectives

By the end of this lesson you should be able to:

- Generate a random number
- Ask the user for a value and store it in a variable
- Use an IF...ELIF...ELSE statement

You might be able to:

- Use a WHILE loop to repeat code until some rule is met
- Use a counter to keep track of how many times you have used a loop

The Task

You have been asked to write a simple version of the “higher – lower game”. The game works like this:

- The computer generates a random whole number between 1 and 100. This is the target number.
- The user is asked to enter a guess
- If the guess is higher than the target number, the computer will print out “Too high!”
- If the guess is lower than the target number, the computer will print out “Too low!”
- If the guess is correct, the computer will print out “Correct!”

Planning

You will need to use 2 variables.

Choose a suitable name for the variable that will hold the **target number**:

Choose a suitable name for the variable that will hold the **guess**:

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Extensions

- After the first guess, repeat (with the same target number) until the user gets the correct answer.
- The computer will count how many attempts the user took and print out a score.
- The computer will give the user a rating based on their score.
- Before starting the game, give the user a choice of difficulties (each with a different range for the random numbers – easy might be 1 to 50, hard might be -500 to +500).
- Include a special value the user can guess that will mean “I give up” and will show the user the correct value.

Objectives

Tick the box if you are able to:

- Generate a random number
- Ask the user for a value and store it in a variable
- Use an IF...ELIF...ELSE statement
- Use a WHILE loop to repeat code until some rule is met
- Use a counter to keep track of how many times you have used a loop