

Programming Exercise 13.2

Over-Under Guessing Game, v.3.0

Purpose. Learn how to use loops.

Requirements. Rewrite your `overUnder2.cpp` from Exercise 6.7 as `overUnder3.cpp`. Modify the program to track the numbers guessed by the user, and output a message if the user guesses a number already guessed. Use an array-based list of capacity 100 to store the guessed numbers. After the user guesses a number and BEFORE checking to see if it is too high or too low or correct, insert these logical steps:

```
Search the list to see if the number has already been guessed -- the list
    may be empty, and that's ok

if the number has already been guessed
    output that the number (say what it is) has already been guessed

otherwise
    add the number to the array-based list
```

Program I/O. Same as Exercise 6.7, plus the "already guessed" message where applicable.

Example. User input in blue:

```
I'm thinking of a number between 1 and 100. Guess what it is: 50
That's too high -- guess again: 25
That's too low -- guess again: 37
That's too high -- guess again: 31
That's too high -- guess again: 25
You already guessed 25 -- guess again: 28
That's right -- it's 28
```