

# Programming Exercise 15.1

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## Over-Under Guessing Game, v.5.0

**Purpose.** Learn how to apply collections for tracking things in game programs.

**Requirements.** Rewrite your `overUnder4.cpp` from Exercise 14.1 as `overUnder5.cpp`. Modify the program to track the numbers guessed by the user, using a collection to store the guessed numbers instead of an array-based list. This not only gets around the capacity limitation in `overUnder3.cpp`, but it does so without having to use objects and links.

**Program I/O.** Same as Exercise 14.1

**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
```