

Each Returned Value Can Have a Different Meaning

What does the return value mean?

What are the possible outcomes?

- bad arguments (ex: -42 guesses allowed) → **2**
- human types something odd → **3**
- human wins the game → **1**
- human loses the game → **0**

Sometimes, we may identify other possibilities

- when we write the code,
- or if we need to change the code later.

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Steps Needed for Our Guessing Game

How can we approach the problem?

1. Check argument values.
2. For each guess allowed,
 - prompt human for a guess,
 - read guess from keyboard, and
 - give feedback based on guess (including winning).
3. If human runs out of guesses, they lose.

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Declare Variables Based on Our Approach

First, we need variables...

```
int32_t guessing_game
(int32_t number, int32_t num_tries)
{
    int32_t guess; // human's guess

    int32_t difference;
                // guess minus number
```

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Start by Checking the Arguments

First step in the code is to check arguments:

- **number** must be in **[1,10]**, and
 - **num_tries** must be at least **1**.
- ```
 if (1 > number || 10 < number ||
 1 > num_tries) {
 return 2;
 }
```

Recall that **return** terminates the function.

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