Declare Variables Based on Our Approach

First, we need a variable…

```
int16_t convert_octal
    (char sign, char dmax, char d2,
     char d3, char d4, char dmin)
{

    int16_t total;   // result
```

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Our Variables Require a Sequence

We can not use a loop with distinct names!

```
total  = ((dmax - '0') << 12);
total += ((d2   - '0') <<  9);
total += ((d3   - '0') <<  6);
total += ((d4   - '0') <<  3);
total += ((dmin - '0') <<  0);
```

What about the sign?

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`total` Has the Converted Value

Negate if necessary. Then return the result.

```
        if ('-' == sign) {

            total = -total;

        }

        return total;

    }
```

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Third Task: Play a Number-Guessing Game

Third task: **play a number-guessing game with the human user**.

The computer chooses a number from 1 to 10.

The human gets a certain number of guesses.

Human wins if they can guess the number.

Human loses if they run out of guesses.

Computer gives feedback based on how close each guess is to the secret number.

What is the function signature?

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