

Description

Use a do-while loop to output "Hello, World!" in a loop. Each time you output "Hello, World!" ask the user whether they would like to continue.

Example

```
>>Hello, World!
Would you like to continue (y/n)? <<y
>>Hello, World!
Would you like to continue (y/n)? <<y
>>Hello, World!
Would you like to continue (y/n)? <<y
>>Hello, World!
Would you like to continue (y/n)? <<n
>>Goodbye!
```

Description

Prompt the user for a number. Use a for loop to output all the numbers from that number to 0. After that loop finishes, use another loop to output all the numbers from 0 to that number.

Example

```
>>Enter a number: <<5
>>5 4 3 2 1 0
>>0 1 2 3 4 5
Would you like to continue (y/n)? <<y
>>Enter a number: <<12
>>12 11 10 9 8 7 6 5 4 3 2 1 0
>>0 1 2 3 4 5 6 7 8 9 10 11 12
Would you like to continue (y/n)? <<n
>>Goodbye!
```

Description

A door has a keypad entry. The combination to get in is 13579. Write a while loop (not a do while loop) that asks the user to enter a key code. The loop will repeat as long as the user enters the wrong code. After the user enters the correct code, the program will print out a welcome message.

Hint: There are many ways to accomplish this, but one way is to create a boolean variable that represents if the door is locked or unlocked. Then think about real life, when you approach a door with a keypad, what state is it initially in before you type anything into the keypad?

Description

Continue the previous exercise, but now add a limited number of tries, say 5. After 5 unsuccessful attempts, the loop ends, but instead of printing a welcome message, it prints a message warning that there were too many incorrect attempts. (But if the user entered the correct number, it will still print the welcome message as before.)

Description

Start a new console project, and repeat the same exercise as the previous, except this time implement it with a do while loop.

Optional Stretch

Move the last while loop or the do-while loop into its own function. The function should return a true if access is granted, or a false if the user didn't enter the correct code within 5 tries.