



Simple Guessing Game

Create a C++ program that will simulate a simple Guessing Game.

The program should pick a random number between 1 and 100.

The user should be asked to guess a number.

If the number is not between 1 and 100, they should be told the guess is invalid and asked for a new guess.

If the user guesses too high, they should be told to guess lower.

If the user guesses too low, they should be told to guess higher.

If the user guesses correctly, they should be told that they are correct. They should then be informed of the number of guesses it took them to get it correctly. They should then be asked if they want to play again.

Solution

```
#include <iostream>
#include <cstdlib>
#include <ctime>

using namespace std;

int main(int argc, char** argv)
{
    int num;
    int playerGuess;

    // Seed the random number generator
    srand(time(NULL));

    // Pick a random number between 1 and 100
    num = rand()%100 + 1;

    do
    {
        do
        {
            cout << "Please enter a number between 1 and 100: ";
            cin >> playerGuess;
        }
        while(playerGuess < 1 || playerGuess > 100);

        if(num < playerGuess)
        {
            cout << "\nThe number is lower.\n\n";
        }

        if(num > playerGuess)
        {
            cout << "\nThe number is higher.\n\n";
        }

        if(num == playerGuess)
        {
            cout << "\nThat is correct!\n";
        }
    }
    while(num != playerGuess);

    return 0;
}
```