

Main.cpp

```
#include "randomNumber.h"

int main()
{
    RandomNumber rn;

    rn.start();

    return 0;
}
```

randomNumber.h

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

class RandomNumber
{
private:
    int random;
    int guess;

public:
    void start();
    void displayMessage();
    void check(int guess);
    void winScreen();
};
```

randomNumber.cpp

```
#include "randomNumber.h"
```

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

using namespace std;

void RandomNumber::start()
{
    srand(time(0));
    random = rand() % 100 + 1;

    cout << "-----Random Number Game-----" << endl;
    displayMessage();
}

void RandomNumber::displayMessage()
{
    guess = 0;
    cout << "Please input your guess: ";
    cin >> guess;

    while (guess < 1)
    {
        cin.clear();
        cin.ignore();
        cout << "Invalid guess. Please re-enter. ";
        cin >> guess;
    }

    check(guess);
}
```

```
};

void RandomNumber::check(int guess)
{
    if (guess > random)
    {
        cout << "Your answer is too high! Try again." << endl;
        displayMessage();
    }
    else if (guess < random)
    {
        cout << "Your answer is too low! Try again." << endl;
        displayMessage();
    }
    else if (guess == random)
    {
        winScreen();
    }
}

void RandomNumber::winScreen()
{
    cout << "\nCongratulations! You got it! Click enter to
restart. ";
    cin.get();
    cin.get();
    cout << endl;
    start();
}
```

output:

```
-----Random Number Game-----  
Please input your guess: 50  
Your answer is too low! Try again.  
Please input your guess: 70  
Your answer is too high! Try again.  
Please input your guess: 60  
Your answer is too low! Try again.  
Please input your guess: 67  
Your answer is too high! Try again.  
Please input your guess: 65  
Your answer is too high! Try again.  
Please input your guess: 64  
Your answer is too high! Try again.  
Please input your guess: 63  
Your answer is too high! Try again.  
Please input your guess: 62
```

Congratulations! You got it! Click enter to restart.

```
-----Random Number Game-----  
Please input your guess: a  
Invalid guess. Please re-enter. 10  
Your answer is too low! Try again.  
Please input your guess: a  
Invalid guess. Please re-enter. 60  
Your answer is too high! Try again.  
Please input your guess: 50  
Your answer is too low! Try again.  
Please input your guess: 56  
Your answer is too high! Try again.  
Please input your guess: 54
```

Congratulations! You got it! Click enter to restart.