```cpp
1  //=====================================================================
2  // Name        : H34086115_hw6-3.cpp
3  // Author      :
4  // Version     :
5  // Copyright   : Your copyright notice
6  // Description : Hello World in C++, Ansi-style
7  //=====================================================================
8
9  #include <iostream>
10 #include <cstdlib>//srand and random
11 #include <ctime>
12 using namespace std;
13
14 int main() {
15     srand (time(0));
16     int guess;
17     int num = 1 + rand()%1000;
18     char selection;
19     for (;;){
20         cout << "I have a number between 1 and 1000." << endl;
21         cout << "Can you guess my number?" << endl;
22         cout << "Please type your first guess." << endl;
23         cin >> guess;
24         if (guess == num){
25             cout << "Excellent! You guessed the number!" << endl;
26             cout << "Would you like to play again(Y or N)?" << endl;
27             cin >> selection;
28             if (selection == 'Y'){
29                 continue;
30             }
31             else
32                 return 0;
33         }
34         else if (guess < num){
35             cout <<"Too low. Try again." << endl;
36         }
37         else if (guess > num){
38             cout <<"Too high. Try again." << endl;
39         }
40     }
41     return 0;
42 }
43
44
```

```
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
800
Too low. Try again.
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
850
Too low. Try again.
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
875
Too high. Try again.
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
870
Too high. Try again.
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
865
Too high. Try again.
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
860
Too high. Try again.
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
855
Too high. Try again.
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
853
Too high. Try again.
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
852
Too high. Try again.
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
851
Excellent! You guessed the number!
Would you like to play again(Y or N)?
```