```cpp
/******************************************************************************
 *       Author:  Jessica Schuler
 *       Date Created:   10-13-13
 *       Filename:   A2_c.cpp
 *
 *       Overview:
 *           This is a game where a user guesses a number between 1 & 50.
 *           The user has 5 rounds to guess the correct number.
 *       Input:
 *               The user inputs a number between 1 & 50.*
 *       Output:
 *               The game will tell the user if they are too high, low, or
 *               correct.  It will also advise the user if they are out of
 *               rounds.
 *
 ******************************************************************************/
#include<iostream>
#include<cstdlib> //using this library to access rand function
#include<ctime> //using this library to access seed function

using namespace std;  //using this to reduce typing

int main()
{
      int guess; //user's guess
      int number=(rand()%50+1); //random number between 1 and 50
      int tries=0; //number of tries
      srand(time(NULL)); //seed random number generator

      cout<<"Guess a number between 1 and 50:"; //asks user a question
      cin>>guess; //asks user input
      tries++; //tracks number of tries

      while(tries<=4)
      {
      if(guess>number) //if the user input is too high
        {
            cout<<"Your guess is too high!";
            cout<<" You have "<<5-tries<<" rounds left to guess!";
            cout<<" Guess Again!";
            cin>>guess;
            tries++;
      }

         else if(guess<number) // if the user input is too low
      {
            cout<<"Your guess is too low!";
            cout<<" You have "<<5-tries<<" rounds left to guess!";
            cout<<" Guess Again!";
            cin>>guess;
            tries++;
      }
      else if(guess==number)//if the user input is correct
      {
            cout<<"You are correct! it took you "<<tries<<
            " rounds to guess the correct number!";
            break;
      }
      }
            cout<<"Game Over";

      return 0;
}
```