Lab 5: a simple Blackjack game. This lab is for fun, ungraded. This lab will help prepare you for the midterm. Because this lab is for fun, a solution is provided (blackjack.cpp). You should, however, attempt this lab on your own, and work out your own solution.

In the game of Blackjack, a card Dealer repeatedly gives cards to himself and to a player. The first one to go over 21 loses. If the player calls an early halt to the "hand", the one closest to 21 wins.

Each card is worth its face-value in points. Ace is 1 point, 2-10 are their face value, Jack is 10, Queen is 10, and King is 10.

If we use the simple command:
```
cardValue = rand()%13;
```
then cardValue will receive an integer in the range 0-12. Therefore, if we use the command:
```
cardValue = rand()%13 + 1;
```
we can simulate playing cards being dealt, in the range 1-13.

then,
```
if (cardValue > 10)
    {
    cardValue = 10;
    }
```
will accommodate Jack, Queen, and King being 10 points. (note: in the real game, an Ace can be 1 or 10 pts, depending on its advantage. We don't need to accommodate that).

The purpose of this lab is to create a simple game of Blackjack. The design and operation is up to you to create any way you wish. The hints below will be for a very simplified version.

1. Use a forever-loop.
2. Make sure you include the libraries <cstdlib> and <ctime>.
3. Seed the random number generator with the int version of time(0)... i.e number of seconds since 1/1/70.
4. A very simple menu will do. Something like:

```
cout << "*********************************************************" << endl;
cout << "* 1: dealer    2:player    3:end this hand    4: exit *" << endl;
cout << "*********************************************************" << endl;
cout << "Enter play: ";
cin >> choice;
```

5. Keep totals for the dealer and player.
6. If the dealer is chosen, add a card to the dealer's total. If the total is > 21, the player wins immediately.
7. If the player is chosen, add a card to the player's total. If the total is > 21, the dealer wins immediately.
8. When the player chooses to "end this hand", the player who is closer to 21 wins immediately.
9. Upon starting a new hand, you must reset the player and dealer totals.

That's it. A simple game to show the use of a random number generator.