```cpp
#include <iostream> // Include necessary header for cout and cin

#include <cstdlib>  // Include necessary header for rand() and srand()

#include <ctime>    // Include necessary header for time()

using namespace std; // Use the standard namespace


class Blackjack {

private:

    int dhand[5];

    int phand[5];

    int dhandSize;

    int phandSize;

    int dhandSum;

    int phandSum;

    int phit;

    int pstand;

    bool playerDone;

    bool dealerDone;


public:

    Blackjack(); // Constructor

    void playGame();

    void addPlayerCard();

    void addDealerCard();

    void printHand();

    void sumHands();

};


// Constructor implementation

Blackjack::Blackjack() {
```

```cpp
    srand(time(0));

    dhandSize = 0;

    phandSize = 0;

    dhandSum = 0;

    phandSum = 0;

    playerDone = false;

    dealerDone = false;

}


void Blackjack::playGame() {

    cout << "Welcome to Blackjack!\n";


    // Start the player and dealer with two cards

    addPlayerCard();

    addPlayerCard();

    addDealerCard();

    addDealerCard();

    sumHands();

    printHand();


    if (dhandSum == 21) {

        cout << "Dealer has blackjack. Dealer wins.\n";

        return;

    } else if (phandSum == 21) {

        cout << "Player has blackjack. Player wins.\n";

        return;

    }


    while (!dealerDone || !playerDone) {
```

```cpp
if (!playerDone) {

    cout << "Would you like to hit? (1 - Yes, 2 - No)\n";

    cin >> phit;


    if (phit == 1) {

        addPlayerCard();

        printHand();

        sumHands();


        if (phandSum > 21) {

            cout << "Player's hand exceeded 21. Player loses.\n";

            return;

        }

    } else if (phit == 2) {

        playerDone = true;

    }

}


if (!dealerDone && dhandSum < 17) {

    addDealerCard();

    printHand();

    sumHands();


    if (dhandSum > 21) {

        cout << "Dealer hand exceeded 21. Dealer loses.\n";

        return;

    }

} else {

    dealerDone = true;
```

```cpp
    }

    if (phandSum == 21 && dhandSum == 21) {
        cout << "Push, player and dealer reached 21.\n";
        return;
    } else if (phandSum == 21) {
        cout << "Player reached 21. Player wins.\n";
        return;
    } else if (dhandSum == 21) {
        cout << "Dealer reached 21. Dealer wins.\n";
        return;
    }

    if (playerDone && dealerDone) {
        if (dhandSum < phandSum) {
            cout << "Sum of your hand exceeds the dealer's sum of " << dhandSum << "! You win!";
            return;
        } else if (phandSum == dhandSum) {
            cout << "Dealer sum of " << dhandSum << " is equal to the sum of your hand. Continue.\n";
        } else {
            cout << "Sum of your hand is lower than the dealer's sum of " << dhandSum << ". You lose!";
            return;
        }
    }
}

void Blackjack::addPlayerCard() {
    if (phandSize <= 5) {
```

```cpp
      phand[phandSize] = 1 + (rand() % 11);

      phandSize++;

   } else {

      cout << "Sorry. You have reached the maximum number of cards (5)." << endl;

      playerDone = true;

   }

}


void Blackjack::addDealerCard() {

   if (dhandSize <= 5) {

      dhand[dhandSize] = 1 + (rand() % 11);

      dhandSize++;

   } else {

      dealerDone = true;

   }

}


void Blackjack::printHand() {

   cout << "Your current hand is...\n";


   for (int i = 0; i < phandSize; i++) {

      cout << "   -" << phand[i] << "-   \n\n";

   }


   cout << "Dealer's current hand is...\n";


   for (int j = 0; j < dhandSize; j++) {

      cout << "   -" << dhand[j] << "-   \n\n";

   }
```

```cpp
}

void Blackjack::sumHands() {

    dhandSum = 0;

    phandSum = 0;

    for (int i = 0; i < dhandSize; i++) {

        dhandSum += dhand[i];

    }


    for (int j = 0; j < phandSize; j++) {

        phandSum += phand[j];

    }


    cout << "Current player hand sum is: " << phandSum << endl;

}


int main() {

    Blackjack game; // Create an instance of the Blackjack game

    game.playGame(); // Start the game

    return 0;

}
```

```
Welcome to Blackjack!
Current player hand sum is: 17
Your current hand is...
    -9-

    -8-

Dealer's current hand is...
    -8-

    -10-

Would you like to hit? (1 - Yes, 2 - No)
1
Your current hand is...
    -9-

    -8-

    -10-

Dealer's current hand is...
    -8-

    -10-

Current player hand sum is: 27
Player's hand exceeded 21. Player loses.
```