Project: Mini-Blackjack Game

Overview:

Mini-[Blackjack](#) is a simplified version of [Blackjack](#). The game is played against the computer (dealer). The objective is to get a card value as close to 21 as possible without going over. In this version, there are no suits, and the cards 2-10 have their face value, while Jack, Queen, and King are each worth 10 points. The Ace can be worth 1 or 11 points.

Step 1: Setting Up The Deck

First, you'll create a deck of cards. Since we're simplifying, you'll only consider the values, not the suits.

Step 2: Dealing The Cards

You'll need a function to handle the dealing of cards to the player and the dealer.

Step 3: Calculating The Score

The score needs to consider the dual value of the Ace (1 or 11). This function calculates the best score based on the cards in hand.

Step 4: The Game Logic

Now, create a function to handle the game's logic.

Step 5: Running The Game

Finally, you can run the game using main function

Project Summary:

Mini-Blackjack is a simplified, interactive card game developed in Python where a player competes against the computer (the dealer) aiming to achieve a card value closest to 21 without exceeding it. The game simplifies the card values and excludes suits to focus on the core gameplay mechanics.

Core Components:

1. **Deck Creation**: The game starts by assembling a deck of cards. In this simplified version, each card's suit is disregarded, and only the card values are considered. Values range from 2 to 10 for numerical cards, while face cards (Jack, Queen, King) are valued at 10, and the Ace can be either 1 or 11, depending on the player's hand.

2. **Dealing Cards**: Both the player and the dealer (computer) are dealt two cards initially. Players can see their cards and one of the dealer's cards, while the other dealer's card remains hidden.
3. **Gameplay Dynamics**: Players have the option to "hit" (receive another card) or "stand" (keep their current hand). The aim is to get as close to 21 as possible without going over. If the player's total exceeds 21, they "bust" and lose the game immediately.
4. **Score Calculation**: A crucial aspect of the game is calculating the total score of the hand. The Ace's dual value adds a strategic element, as it can be counted as either 1 or 11 to optimize the player's score.
5. **Dealer's Play**: After the player stands, the dealer reveals the hidden card and may draw additional cards. The dealer must hit if their score is below 17 and stand otherwise.
6. **Determining the Winner**: The game concludes by comparing the scores of the player and the dealer. The one with a score closest to 21 without exceeding it wins the game. If both have the same score, the game ends in a draw.