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Due Date: February 10 ,2019
CIS-5
Dr.Lehr

Final Project:
Blackjack

Introduction:

The objective of Blackjack is to get the sum of your cards as close to equalling 21 without going over. To beat the dealer, your sum has to be greater than theirs, while not exceeding 21. If the player/dealers sum exceeds 21 then they bust. If both the dealer, and the player bust then it is a tie. It is also a tie if the dealers sum and the players sum both equal each other while being under 21.

The Players Turn:

The game begins with the the dealer and player getting 2 cards, one of the dealer's card will be right side up. If the player would like to get closer to 21, they hit and receive another card. If the player is okay with their sum then they stay and it is the dealers turn. Because the player goes 1st, this gives the dealer an advantage, giving the player a chance to bust before the dealer even has to go.

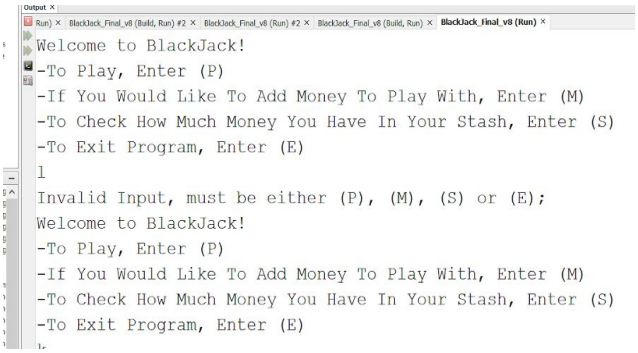
The Dealers Turn:

The dealer flips over their other card, now showing the second value to the player. The dealer will then hit and receive another card until their sum is equal to or greater 17.

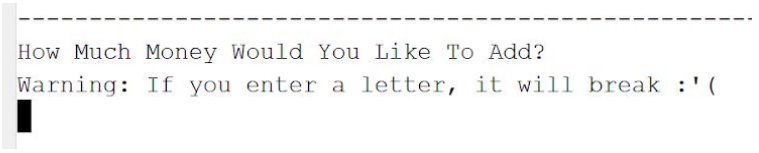
The Game:

1) The game begins with a menu. There are 4 options available in the menu
    a) To play the user enters (P)
    b) To add money to their stash, they enter (M)
    c) To check how much money they have in their stash, they enter (S)
    d) To exit the program the user enters (E)

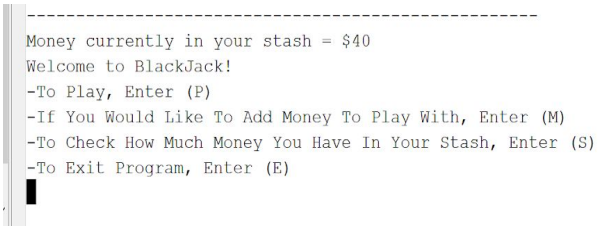
2) If they don't listen, Validates User Input and repeats question



3) If the User enters (M)



4) If The User enters (S)



5) If the User enters (E)

```
Welcome to BlackJack!
-To Play, Enter (P)
-If You Would Like To Add Money To Play With, Enter (M)
-To Check How Much Money You Have In Your Stash, Enter (S)
-To Exit Program, Enter (E)
e

RUN SUCCESSFUL (total time: 13m 18s)
```

6) When the user inputs (P), they are then asked how much money they would like to bet.

```
Welcome to BlackJack!
-To Play, Enter (P)
-If You Would Like To Add Money To Play With, Enter (M)
-To Check How Much Money You Have In Your Stash, Enter (S)
-To Exit Program, Enter (E)
p


------------------------------------------------------------
Enter the Amount of money you would like to bet.
Minimum bet = $5----------------Max Bet = $500
Bet =
```

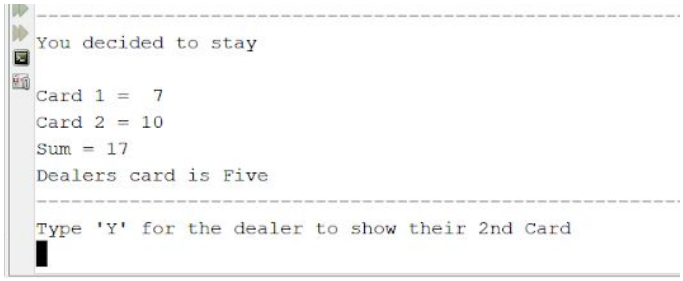
7) The user then chooses whether they want to hit or not with (Y), or (N)
   a) Validates User input if they enter anything besides y or n

```
------------------------------------------------------
Card 1 = Ten
Card 2 = Queen
Dealers Card is Ace
------------------------------------------------------
Would you like to hit?-Input 'Y' for yes and 'N' for no
```

8) If the user enters (Y), they receive another card

```
Would you like to hit?-Input 'Y' for yes and 'N' for no
y
Card 1 = Seven
Card 2 = King
Card 3 = Six
Dealers Card is King
------------------------------------------------------------
Would you like to hit?-Input 'Y' for yes and 'N' for no
```

9) If the user enters (N), they stay and their sum gets calculated and displayed



10)In this case the player wins , the game then asks the user if they want to play again. If the user enters (Y), the game restarts. If they enter (N) the game ends.

Special Note: If the user gets an Ace

If the user receives an ace, they pick the value of that card when they decide to stay. The sum is then calculated.

```
Would you like to hit?-Input 'Y' for yes and 'N' for no
y
Card 1 = Ten
Card 2 = Five
Card 3 = Ace
Dealers Card is Jack
-----------------------------------------------------
Would you like to hit?-Input 'Y' for yes and 'N' for no
n
-----------------------------------------------------
You decided to stay

Card 3 is an Ace!
If you would like the value to = '11', input Y. If you would like the input to = '1', input 'N'
n
Card 1 = 10
Card 2 = 5
Card 3 =1
Sum = 16
Dealers card is Jack
-----------------------------------------------------
Type 'Y' for the dealer to show their 2nd Card
y
```

Another Sample Game