

Project name: **Blackjack Scores**

char	a	2	3	t	j	q	k
card	1	2	3	10	11	12	13
value	11/1	2		10		10	
	better one						

Description:

Write program that scores a blackjack hand. In blackjack, a player receives from two to five cards. The cards 2 through 10 are scored as 2 through 10 points each, respectively. The face cards – jack, queen and king – are scored as 10. The goal is to come as close to a score of 21 as possible without going over 21. Hence any score over 21 is called ‘busted’. The ace can be counted, as 1 or 11, whichever is better for the player. For example, an ace and a 10 can be scored as either 11 or 21, but since 21 is a better score, this hand is scored as 21. An ace and two 8s can be scored as either 17 or 27, but since 27 is a “busted” score, this hand is scored as 17.

The player is first asked how many cards she or he has, and the player is supposed to respond with one of ‘2’, ‘3’, ‘4’ or ‘5’. Of course, the player does not type in the single quotes. The input should be checked for validity. On error, your program should respond with error message and at this point the player should be able to exit the program or start from the beginning. For this input, you should ignore all whitespace characters as well as all characters after first non-whitespace character is provided.

The player is then asked for all card values. Input values 2 through 9 should be given as the characters ‘2’ through ‘9’, and input values for ten, jack, queen, king, and ace as the characters ‘t’, ‘j’, ‘q’, ‘k’, and ‘a’, respectively. Of course, the player does not type in the single quotes. You should allow upper as well as lowercase letters as input. If anything else is given, after error message, the player should have option of exiting program or starting from the beginning. Note, it is not possible to have five cards all having the same value. For this input, you should ignore all whitespace characters as well as all characters after required number of characters are provided.

After reading in the values, your program should convert them from character values to numeric card scores, then calculates a value of the hand, prints a score plus the word “Busted” if the score is above 21 or the word “Blackjack” if the score is 21.

Your program should include a loop that lets the player start new calculation until she or he quits.

You are not allowed to use global variables, pointers as function arguments (except in scanf) or arrays.

Submissions:

a. your source code file using command:

`submit c2421ac lab1 your_source_code_file` and

b. a hard copy of your source code

Due date: Tuesday, September 12, 2017

fl1|~/Cse2421/Lab1> jack

Enter a number of cards (2-5): 3

Number of cards entered = 3

Enter the faces of the cards, 2-9, t, j, q, k, a: tj 4

Faces of cards entered = t j 4

The value of your hand = 24 --> Busted

Type Y or y to try again: y

You typed: y

Enter a number of cards (2-5): 4

Number of cards entered = 4

Enter the faces of the cards, 2-9, t, j, q, k, a: aaaa

Faces of cards entered = a a a a

The value of your hand = 14 < 21 no more following

Type Y or y to try again: y

You typed: y

Enter a number of cards (2-5): 5 cccc

Number of cards entered = 5

Enter the faces of the cards, 2-9, t, j, q, k, a: 2 3 4 t 2 3r

Faces of cards entered = 2 3 4 t 2

The value of your hand = ⁼²¹21 --> Blackjack

Type Y or y to try again: q

You typed: q

fl1|~/Cse2421/Lab1>
