Guess the Card Game

For this program you will create a guessing game that you can play a variety of ways. You will have to use a series of functions, selection statements, and loops. Your program will have to work as specified and the output must look the same as the examples. All data MUST be validated using validation loops. For all character input values, you have to accept either an uppercase or lowercase letter. In addition to the requirements, this program, you will also be graded on your use of functions and layout of code.

Here is information on how the game is played:

✓ The user starts with 20 points.

✓ The first thing your program does is tell the user how many points that they have and then ask them what they would like to do.

```
You have 20 points to play with, what would you like to do?
```

✓ You will then present them with the following menu:

```
A.      Guess a suit (Hearts, Diamonds, Spades and Clubs)
B.      Guess a number card (Ace counts as a number 1, 2 -10)
C.      Guess a face card (Jack, Queen, King)
D.      Guess a color card (Red or Black)
Q.      Quit the game -->
```

*NOTE: Hearts and Diamonds are red cards, and Clubs and Spades are Black cards.

✓ Depending upon which game was chosen, you will have to ask them to guess either the suit, a number, a face card or a color. See sample output for more information!

For Guess a Suit:

```
Choose a suit from the following menu:

    H: Hearts
    D: Diamonds
    S: Spades
    C: Clubs
```

For Guess a Number:

```
Choose a number between 1-10
```

For Guess a Face Card:

```
Choose a face card:


    J: Jack
    Q: Queen
    K: King
```

For Guess a Color:

```
Choose a color:

    R: Red
    B: Black
```

✓ You will then have to ask they how many points they would like to play with:

```
How many points would you like to use?
```

✓ You will have to subtract out the number of points that they wish to play with.

✓ You will then have to use the rand() library function to get a random number between 1 and 55.

✓ Once you have the random number, the users guess, and the number of points they would like to play with, you will have to determine whether or not they have won and how many points they have won. You can use the following chart to see what each random number refers to:

Random Number	Card	Suit
1	Ace	Hearts
2	2	Hearts
3	3	Hearts
4	4	Hearts
5	5	Hearts
6	6	Hearts
7	7	Hearts
8	8	Hearts
9	9	Hearts
10	10	Hearts
11	Jack	Hearts
12	Queen	Hearts
13	King	Hearts
14	Joker	
15	Ace	Diamonds
16	2	Diamonds
17	3	Diamonds
18	4	Diamonds
19	5	Diamonds
20	6	Diamonds
21	7	Diamonds
22	8	Diamonds

23	9	Diamonds
24	10	Diamonds
25	Jack	Diamonds
26	Queen	Diamonds
27	King	Diamonds
28	Joker	
29	Ace	Spades
30	2	Spades
31	3	Spades
32	4	Spades
33	5	Spades
34	6	Spades
35	7	Spades
36	8	Spades
37	9	Spades
38	10	Spades
39	Jack	Spades
40	Queen	Spades
41	King	Spades
42	Joker	
43	Ace	Clubs
44	2	Clubs
45	3	Clubs
46	4	Clubs
47	5	Clubs
48	6	Clubs
49	7	Clubs
50	8	Clubs
51	9	Clubs
52	10	Clubs
53	Jack	Clubs
54	Queen	Clubs
55	King	Clubs

✓ If they win: Simply tell them that they have won and how many play points they are getting. Each game has a different prize multiplier as follows:

> Guess a suit: play points * 4
>
> Guess a number card: play points * 3
>
> Guess a face card: play points * 5
>
> Guess a color card: play points * 2

✓ Regardless of which game they choose, if the random number is a Joker, then they win the bonus round of 10 times the number of play points that they selected. You must tell them that they won the bonus round!

✓ Allow them to continue to play as long as they wish to or until they run out of play points, whichever comes first.