

**Note:** You are encouraged to make your output look nicer than what is given below. However, your program should print out similar information such that a user knows what to do next (user friendly).

You can think of **this sample code execution** as the minimum requirement of the project.

### Sample code execution 1

**Red/Bold is entered by a user**

Comments are there to explain why I did what I did below

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|-----|
|   Let's play Crazy Eight   |
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```

```
|Simple Rules                |
|Card(s) that can be played  |
|- Suit matched with Top card|
|- Face matched with Top card|
|- 8, then you choose the next|
|-----|
|-----|
```

Enter your name: **Kay**

Hit Enter key to continue:

This is optional, I choose to put it there so that there is a pause between each step. Your program may or may not do this (again, make your program user friendly)

Top card is 6♠

This is the top card picked from the deck to start the game

Kay's hand: 8♠ A♦ K♥ 8♣ 6♥ Q♦ 7♦ 7♣

Enter card number (1-8) you want to pick: **2**

a user chose card 2 but it cannot be played since it did not match with top card (6♠)

A♦ can NOT be played for top card 6♠

Enter card number (1-8) you want to pick: **0**

a user cannot pick a card that is NOT available, keep asking a user to enter the card number that can be played!

Enter card number (1-8) you want to pick: **9**

Enter card number (1-8) you want to pick: **5**

Remove 6♥

Display the card that a user picked

Kay's hand: 8♠ A♦ K♥ 8♣ Q♦ 7♦ 7♣

And display the hand after the card is removed

Hit Enter key to continue:

Top card is 6♥

Observe that Top card is now changed to 6♥ (one that a user just played)

Computer Turn

Computer's hand: Q♠ 9♠ Q♥ 4♦ K♦ 6♦ 3♦ 5♣

Hit Enter key to continue:

Computer plays Q♥

Computer's hand: Q♠ 9♠ 4♦ K♦ 6♦ 3♦ 5♣

Hit Enter key to continue:

I chose to display the computer hand and the card that the computer is used to play (make it easier to develop/debug the program)

In the actual game, we will not display the computer hand. We will display only Computer plays ...

Note: Do have these part of the code in your program (this will make it easy to grade at the final project demo).

Top card is Q♥

Observe that Top card is now changed to Q♥ (one that the computer just played)

Kay's hand: 8♠ A♦ K♥ 8♣ Q♦ 7♦ 7♣

Enter card number (1-7) you want to pick: 5

Remove Q♦

Kay's hand: 8♠ A♦ K♥ 8♣ 7♦ 7♣

Hit Enter key to continue:

Top card is Q♦

Observe that Top card is now changed to Q♥ (one that the user just played)

Computer Turn

Computer's hand: Q♠ 9♠ 4♦ K♦ 6♦ 3♦ 5♣

Hit Enter key to continue:

Computer plays 4♦

Computer's hand: Q♠ 9♠ K♦ 6♦ 3♦ 5♣

Hit Enter key to continue:

Top card is 4♦

Kay's hand: 8♠ A♦ K♥ 8♣ 7♦ 7♣

Enter card number (1-6) you want to pick: 8

8 is not available since there are only 6 cards  
Your program asks a user to pick another card

Enter card number (1-6) you want to pick: 2

Remove A♦

Kay's hand: 8♠ K♥ 8♣ 7♦ 7♣

Hit Enter key to continue:

Top card is A♦

Computer Turn

Computer's hand: Q♠ 9♠ K♦ 6♦ 3♦ 5♣

Hit Enter key to continue:

Computer plays K♦

Computer's hand: Q♠ 9♠ 6♦ 3♦ 5♣

Hit Enter key to continue:

Top card is K♦

Kay's hand: 8♠ K♥ 8♣ 7♦ 7♣

Enter card number (1-5) you want to pick: 4

Remove 7♦

Kay's hand: 8♠ K♥ 8♣ 7♣

Hit Enter key to continue:

Top card is 7♦

Computer Turn

Computer's hand: Q♠ 9♠ 6♦ 3♦ 5♣

Hit Enter key to continue:

Computer plays 6♦

Computer's hand: Q♠ 9♠ 3♦ 5♣

Hit Enter key to continue:

Top card is 6♦

Kay's hand: 8♠ K♥ 8♣ 7♣

Enter card number (1-4) you want to pick: 4

7♣ can NOT be played for top card 6♦

Enter card number (1-4) you want to pick: 3

Which suit do you want to play next?

Enter H/h for Heart, D/d for Diamond, C/c for Club, S/s for Spade: H

Suit to play next is ♥

A user chose card number 3 which is 8♣

Your program should ask what suit that a user want to plays next!

Hit Enter key to continue:

Suit to play next is ♥

Computer Turn

Computer's hand: Q♠ 9♠ 3♦ 5♣

Hit Enter key to continue:

No card matched, take a card from stockpile

Card is 3♣

Dealer's hand: Q♠ 9♠ 3♦ 5♣ 3♣

No card matched, take a card from stockpile

Card is 10♣

Dealer's hand: Q♠ 9♠ 3♦ 5♣ 3♣ 10♣

No card matched, take a card from stockpile

The computer's hand has no card that can be played (top card now is ♥)

The computer will take a card from the stockpile (up to 3 cards) until finding a card that can be played.

The card taken from a stockpile should be added to the hand

Card is 10♥  
Computer plays 10♥

The third card taken from stockpile is 10♥  
which can be played (since top card is ♥)

Hit Enter key to continue:

Top card is 10♥

Kay's hand: 8♠ K♥ 7♣

Enter card number (1-3) you want to pick: **2**

Remove K♥

Kay's hand: 8♠ 7♣

Hit Enter key to continue:

Top card is K♥

Computer Turn

Computer's hand: Q♠ 9♠ 3♦ 5♣ 3♣ 10♣

Hit Enter key to continue:

No card matched, take a card from stockpile

Card is 2♥  
Computer plays 2♥

Hit Enter key to continue:

Top card is 2♥

Kay's hand: 8♠ 7♣

Enter card number (1-2) you want to pick: **1**

Which suit do you want to play next?

Enter H/h for Heart, D/d for Diamond, C/c for Club, S/s for Spade: **C**

Suit to play next is ♣

Hit Enter key to continue:

Suit to play next is ♣

Computer Turn

Computer's hand: Q♠ 9♠ 3♦ 5♣ 3♣ 10♣

Hit Enter key to continue:

Computer plays 5♣

Computer's hand: Q♠ 9♠ 3♦ 3♣ 10♣

Hit Enter key to continue:

Top card is 5♣

Kay's hand: 7♣

Enter card number (1-1) you want to pick: 1

Remove 7♣

:) :) :) :) :) :) :) :) :) :)

Congratulations!!! You Won

:) :) :) :) :) :) :) :) :) :)

Do you want to continue (q or Q to quit)? **y**

Enter your name: **John**

Observe that the player name can be changed for the new game

Hit Enter key to continue:

Top card is K♥

John's hand: 5♣ J♦ 10♠ A♥ Q♥ 7♦ 9♣ 7♥

Enter card number (1-8) you want to pick: **1**

5♣ can NOT be played for top card K♥

Enter card number (1-8) you want to pick: **2**

J♦ can NOT be played for top card K♥

Enter card number (1-8) you want to pick: **10**

Enter card number (1-8) you want to pick: **4**

Remove A♥

John's hand: 5♣ J♦ 10♠ Q♥ 7♦ 9♣ 7♥

Hit Enter key to continue:

Top card is A♥

Computer Turn

Computer's hand: 5♦ 4♠ 9♥ 6♠ 5♣ 2♣ 7♣ 8♦

Hit Enter key to continue:

Computer plays 9♥

Computer's hand: 5♦ 4♠ 6♠ 5♣ 2♣ 7♣ 8♦

Hit Enter key to continue:

Top card is 9♥

John's hand: 5♣ J♦ 10♠ Q♥ 7♦ 9♣ 7♥

Enter card number (1-7) you want to pick: 6

Remove 9♣

John's hand: 5♣ J♦ 10♠ Q♥ 7♦ 7♥

Hit Enter key to continue:

Top card is 9♣

Computer Turn

Computer's hand: 5♦ 4♠ 6♠ 5♣ 2♣ 7♣ 8♦

Hit Enter key to continue:

Computer plays 7♣

Computer's hand: 5♦ 4♠ 6♠ 5♣ 2♣ 8♦

Hit Enter key to continue:

Top card is 7♣

John's hand: 5♣ J♦ 10♣ Q♥ 7♦ 7♥

You have 2 cards with 7 Do you want to play those cards (Y/N)?

y

Remove 7♦

Remove 7♥

John's hand: 5♣ J♦ 10♣ Q♥

Hit Enter key to continue:

Top card is 7♥

Computer Turn

Computer's hand: 5♦ 4♣ 6♣ 5♣ 2♣ 8♦

Hit Enter key to continue:

This game continues until one hand wins!

The user's hand has 2 cards that are matched with Top card, my program choose to ask whether the user want to play with those 2 cards.

If y, both cards are removed from the hand