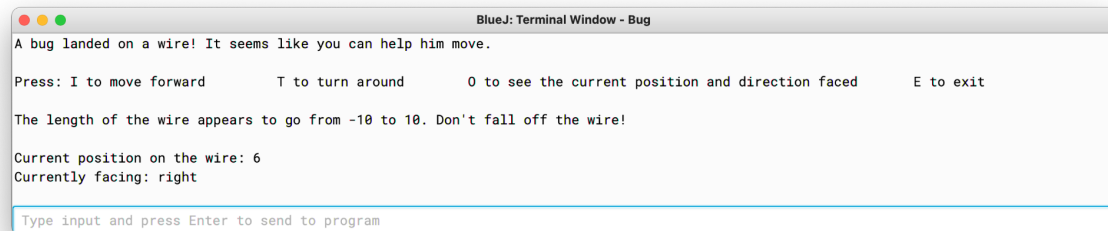


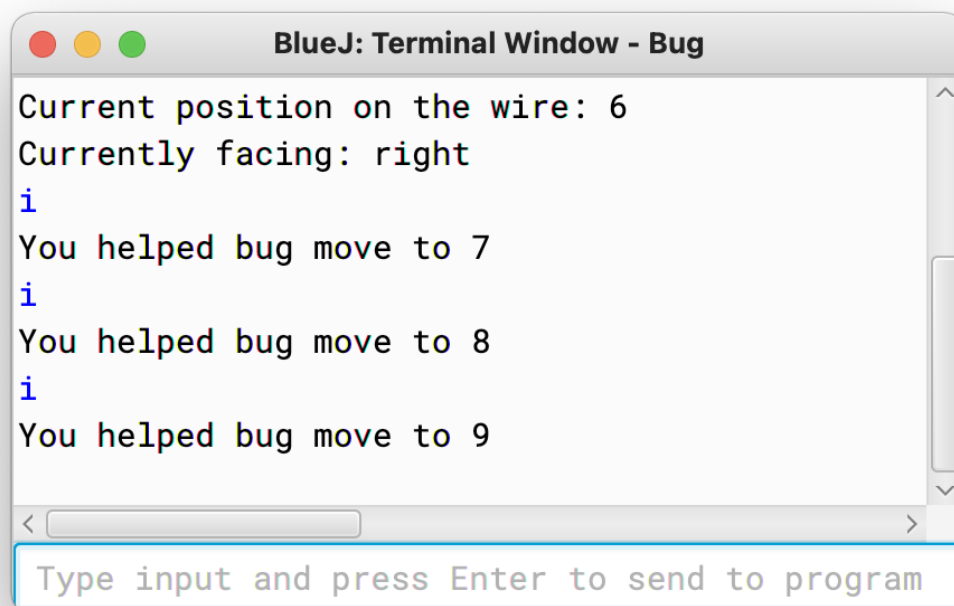
Question 1: Bug Test Exhibits

Upon starting Main method



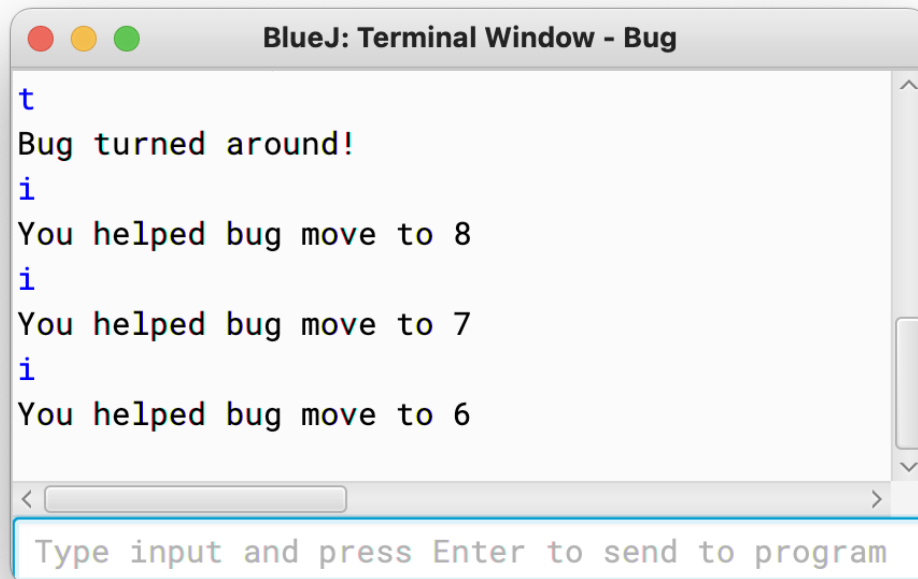
```
BlueJ: Terminal Window - Bug
A bug landed on a wire! It seems like you can help him move.
Press: I to move forward      T to turn around      O to see the current position and direction faced      E to exit
The length of the wire appears to go from -10 to 10. Don't fall off the wire!
Current position on the wire: 6
Currently facing: right
Type input and press Enter to send to program
```

Moving bug three paces to the right



```
BlueJ: Terminal Window - Bug
Current position on the wire: 6
Currently facing: right
i
You helped bug move to 7
i
You helped bug move to 8
i
You helped bug move to 9
Type input and press Enter to send to program
```

Turning around and moving back to the left

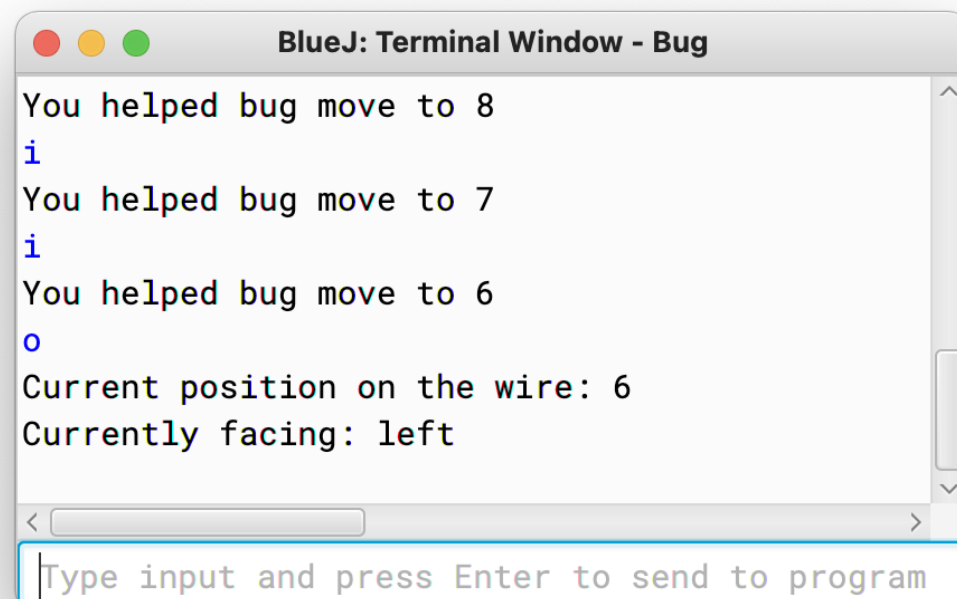


A screenshot of a BlueJ terminal window titled "BlueJ: Terminal Window - Bug". The window has a standard macOS-style title bar with red, yellow, and green window control buttons. The terminal content shows a sequence of interactions: a blue prompt character 't' followed by the text "Bug turned around!", a blue prompt character 'i' followed by "You helped bug move to 8", another blue 'i' followed by "You helped bug move to 7", and a third blue 'i' followed by "You helped bug move to 6". At the bottom, there is a light gray input field with the placeholder text "Type input and press Enter to send to program".

```
t
Bug turned around!
i
You helped bug move to 8
i
You helped bug move to 7
i
You helped bug move to 6
```

Type input and press Enter to send to program

Output current position and direction faced

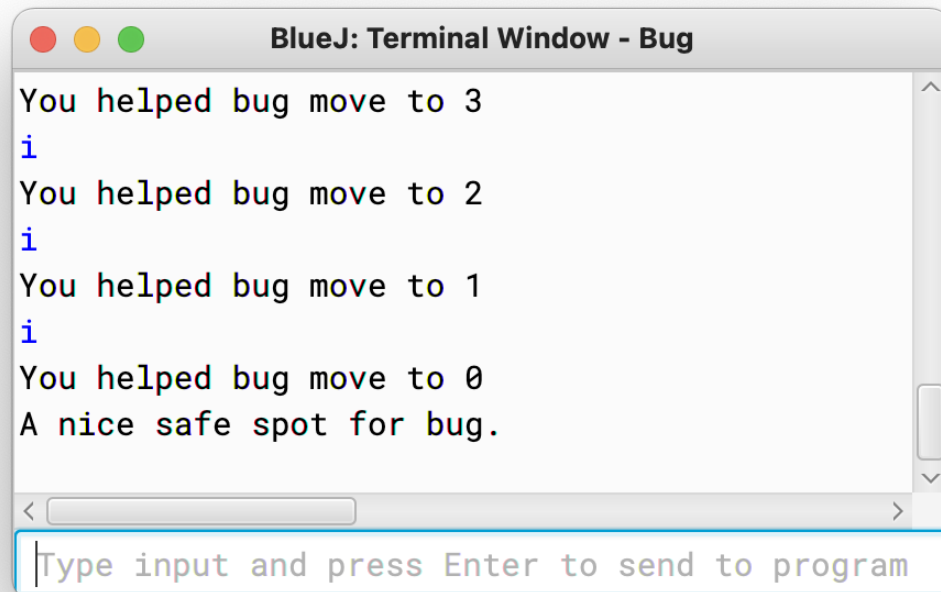


A screenshot of a BlueJ terminal window titled "BlueJ: Terminal Window - Bug". The terminal content continues from the previous state: "You helped bug move to 8", a blue prompt character 'i', "You helped bug move to 7", a blue 'i', "You helped bug move to 6", a blue prompt character 'o', "Current position on the wire: 6", and "Currently facing: left". The bottom input field is the same as in the previous screenshot, with the placeholder text "Type input and press Enter to send to program".

```
You helped bug move to 8
i
You helped bug move to 7
i
You helped bug move to 6
o
Current position on the wire: 6
Currently facing: left
```

Type input and press Enter to send to program

Being in the middle of the wire



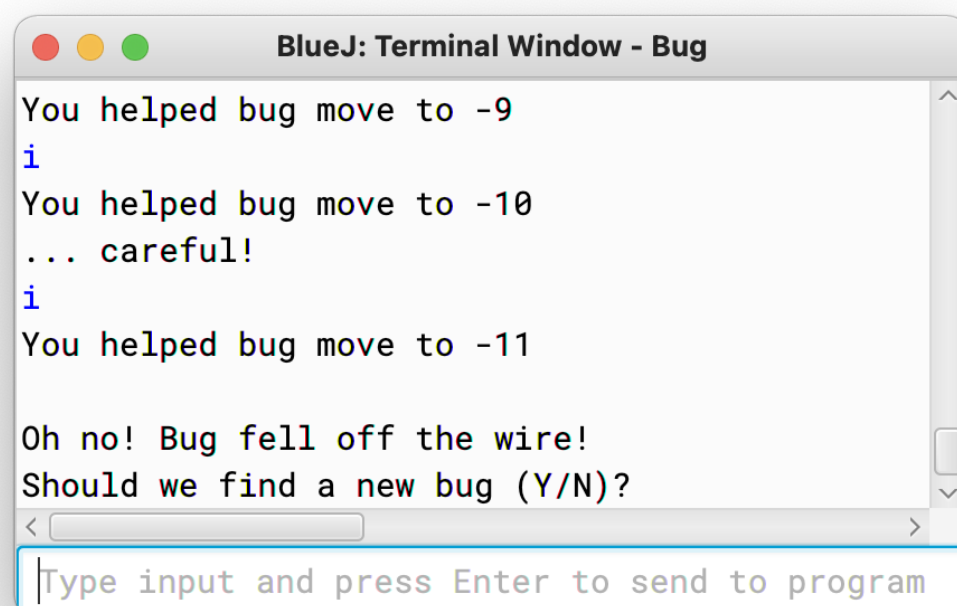
A screenshot of a BlueJ terminal window titled "BlueJ: Terminal Window - Bug". The window has a standard macOS-style title bar with red, yellow, and green window control buttons. The terminal content shows a sequence of interactions: the program outputs "You helped bug move to 3", followed by a blue prompt character "i", then "You helped bug move to 2", another blue prompt "i", then "You helped bug move to 1", a third blue prompt "i", then "You helped bug move to 0", and finally "A nice safe spot for bug." The terminal has a scroll bar on the right and a horizontal scrollbar at the bottom. Below the terminal area is a text input field with the placeholder text "Type input and press Enter to send to program".

```
BlueJ: Terminal Window - Bug

You helped bug move to 3
i
You helped bug move to 2
i
You helped bug move to 1
i
You helped bug move to 0
A nice safe spot for bug.

Type input and press Enter to send to program
```

Close to falling off the wire and then falling off the wire.



A screenshot of a BlueJ terminal window titled "BlueJ: Terminal Window - Bug". The window has a standard macOS-style title bar with red, yellow, and green window control buttons. The terminal content shows a sequence of interactions: the program outputs "You helped bug move to -9", followed by a blue prompt character "i", then "You helped bug move to -10", then "... careful!", then another blue prompt "i", then "You helped bug move to -11". After a gap, the program outputs "Oh no! Bug fell off the wire!" and "Should we find a new bug (Y/N)?". The terminal has a scroll bar on the right and a horizontal scrollbar at the bottom. Below the terminal area is a text input field with the placeholder text "Type input and press Enter to send to program".

```
BlueJ: Terminal Window - Bug

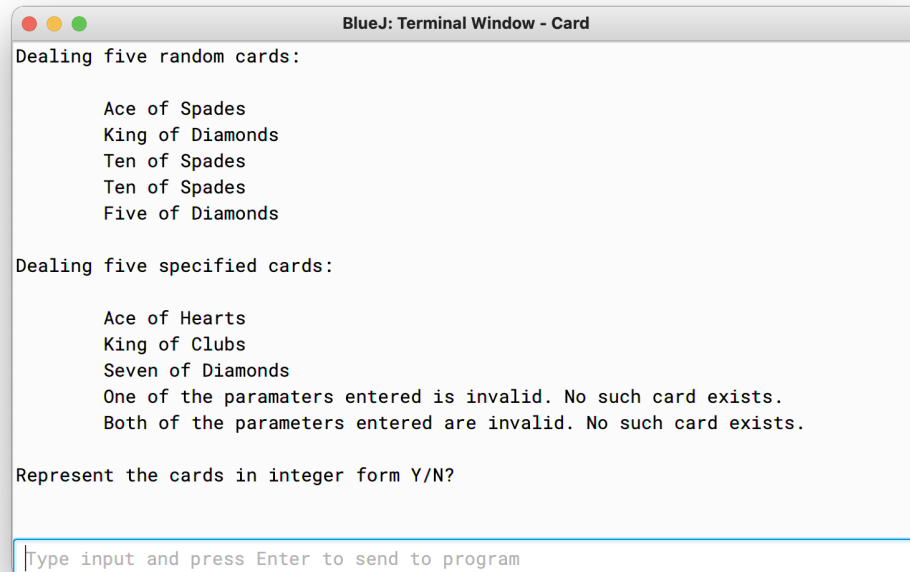
You helped bug move to -9
i
You helped bug move to -10
... careful!
i
You helped bug move to -11

Oh no! Bug fell off the wire!
Should we find a new bug (Y/N)?

Type input and press Enter to send to program
```

Question 2: Card Test Exhibits

Upon Starting the Main method:

A terminal window titled "BlueJ: Terminal Window - Card" showing the output of a program. It displays two sets of five random cards and five specified cards, followed by a prompt to represent the cards in integer form.

```
BlueJ: Terminal Window - Card
Dealing five random cards:

    Ace of Spades
    King of Diamonds
    Ten of Spades
    Ten of Spades
    Five of Diamonds

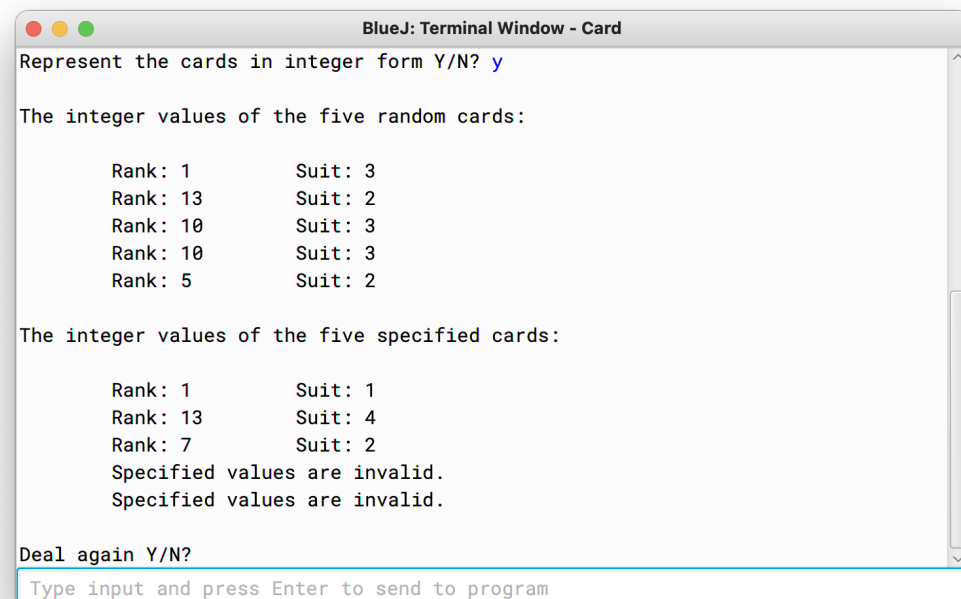
Dealing five specified cards:

    Ace of Hearts
    King of Clubs
    Seven of Diamonds
    One of the paramaters entered is invalid. No such card exists.
    Both of the parameters entered are invalid. No such card exists.

Represent the cards in integer form Y/N?

Type input and press Enter to send to program
```

Asking for the cards to be represented in integer form:

A terminal window titled "BlueJ: Terminal Window - Card" showing the output of a program. It displays the integer values for the five random cards and the five specified cards, followed by a prompt to deal again.

```
BlueJ: Terminal Window - Card
Represent the cards in integer form Y/N? y

The integer values of the five random cards:

    Rank: 1      Suit: 3
    Rank: 13     Suit: 2
    Rank: 10     Suit: 3
    Rank: 10     Suit: 3
    Rank: 5      Suit: 2

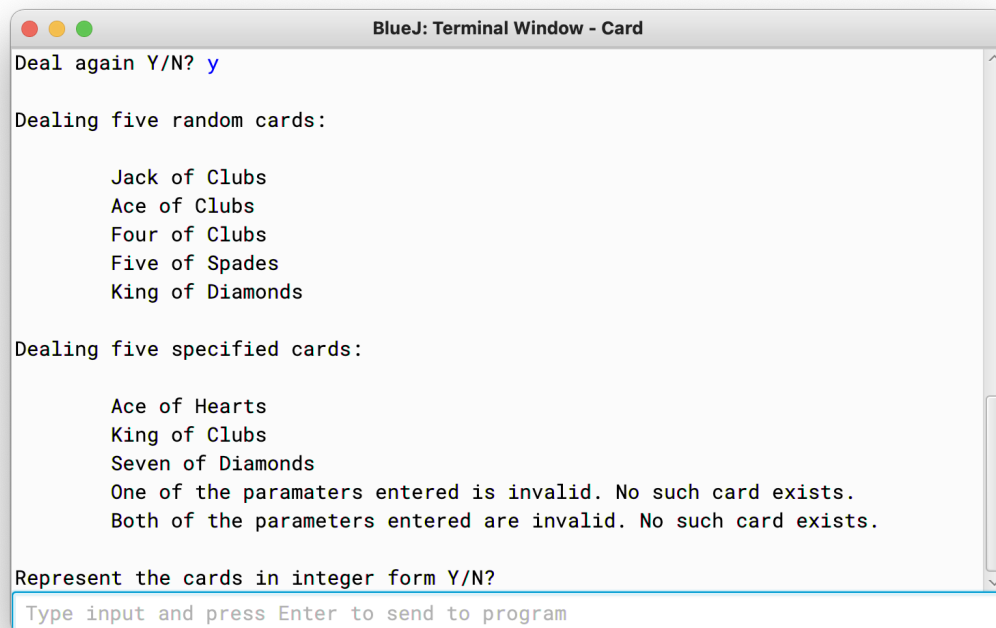
The integer values of the five specified cards:

    Rank: 1      Suit: 1
    Rank: 13     Suit: 4
    Rank: 7      Suit: 2
    Specified values are invalid.
    Specified values are invalid.

Deal again Y/N?

Type input and press Enter to send to program
```

Deal again:

A terminal window titled "BlueJ: Terminal Window - Card" showing the execution of a card dealing program. The user has entered 'y' to deal again. The program displays five random cards: Jack of Clubs, Ace of Clubs, Four of Clubs, Five of Spades, and King of Diamonds. It then displays five specified cards: Ace of Hearts, King of Clubs, Seven of Diamonds, and two error messages: "One of the paramaters entered is invalid. No such card exists." and "Both of the parameters entered are invalid. No such card exists." The prompt "Represent the cards in integer form Y/N?" is shown at the bottom with an input field containing the placeholder text "Type input and press Enter to send to program".

```
BlueJ: Terminal Window - Card
Deal again Y/N? y

Dealing five random cards:

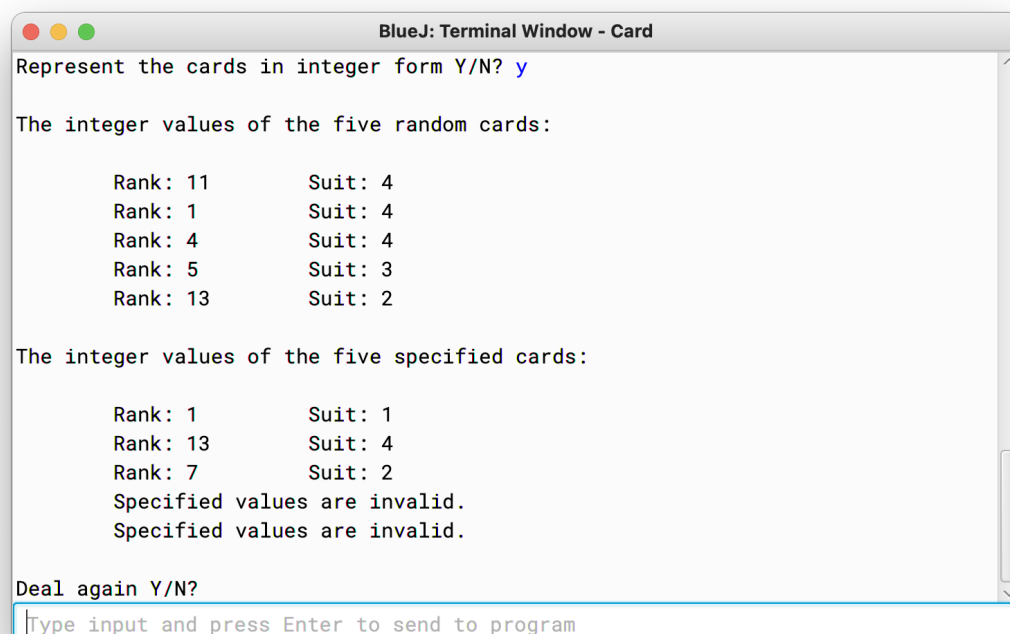
    Jack of Clubs
    Ace of Clubs
    Four of Clubs
    Five of Spades
    King of Diamonds

Dealing five specified cards:

    Ace of Hearts
    King of Clubs
    Seven of Diamonds
    One of the paramaters entered is invalid. No such card exists.
    Both of the parameters entered are invalid. No such card exists.

Represent the cards in integer form Y/N?
Type input and press Enter to send to program
```

Integer form a second time:

A terminal window titled "BlueJ: Terminal Window - Card" showing the integer representation of the cards. The prompt "Represent the cards in integer form Y/N?" is shown with 'y' entered. The program displays the integer values for the five random cards and the five specified cards. The specified cards section shows three valid pairs (Rank: 1, Suit: 1; Rank: 13, Suit: 4; Rank: 7, Suit: 2) followed by two "Specified values are invalid." messages. The prompt "Deal again Y/N?" is shown at the bottom with an input field containing the placeholder text "Type input and press Enter to send to program".

```
BlueJ: Terminal Window - Card
Represent the cards in integer form Y/N? y

The integer values of the five random cards:

    Rank: 11      Suit: 4
    Rank: 1       Suit: 4
    Rank: 4       Suit: 4
    Rank: 5       Suit: 3
    Rank: 13      Suit: 2

The integer values of the five specified cards:

    Rank: 1       Suit: 1
    Rank: 13      Suit: 4
    Rank: 7       Suit: 2
    Specified values are invalid.
    Specified values are invalid.

Deal again Y/N?
Type input and press Enter to send to program
```