Java Pizza Planet

Time required: 120 minutes

Please read the directions carefully before beginning the assignment.

- Comment each line of code as shown in the tutorials and other code examples.
- Follow all directions carefully and accurately.
- Think of the directions as minimum requirements.

Pseudocode

1. Write pseudocode or TODO for the exercise.
2. Comment your code to show evidence of understanding.

Requirements

Your company has expanded into other food ordering systems. You did such a good job with the Python pizza ordering system, your boss wants you to build another sytem in Java for their Android tablets.

You can build a food ordering system for any food sales franchise, Pizza Planet, Sandwich City, Marvelous Muffins, Terrific Tacos, or any other food sales you wish.

Create a Java program for a food ordering system.

Based on a user's order, calculate their final bill.

HINT: Some decisions stand alone; some are mutually exclusive.

```
Small Pizza: $15
Medium Pizza: $20
Large Pizza: $25
Pepperoni for Small Pizza: +$2
Pepperoni for Medium or Large Pizza: +$3
Extra cheese for any size pizza: +$1
```

Java char Data Type

Python makes it very easy to compare strings using the standard relational operators. Strings in Java are a bit more complicated. As we are only using one letter, we are going to use the **char** data type for our menu.

You can see in the example below how to create and compare char variables.

```
char ch1 = 'A';
char ch2 = 'B';
char ch3 = 'A';
System.out.println(ch1 == ch2);
System.out.println(ch1 < ch2);
System.out.println(ch3 == ch1);
```

Getting char as input is a bit different as shown in the following example.

```java
// Java program to read character using Scanner class
import java.util.Scanner;

public class MenuChoice {
    public static void main(String[] args) {
        // Declare character variable
        char menuChoice;
        // Declare Scanner object for input
        Scanner keyboard = new Scanner(System.in);

        // Prompt user
        System.out.print("Please enter a menu choice (Y/N): ");

        // Character input
        menuChoice = keyboard.next().charAt(0);

        // Convert char to lowercase for easier comparison
        // You can also use toUpperCase()
        menuChoice = Character.toLowerCase(menuChoice);

        // Print the Menu Choice value
        System.out.println("Menu Choice: " + menuChoice);

        // Close Scanner OS resource
        keyboard.close();
    }
}
```

Replit [MenuChoice]

Example run:

```
+-------------------------------------------------+
|      ---       Java Pizza Planet       ---      |
+-------------------------------------------------+

 Welcome to Python Pizza Planet Deliveries!
 Small Pizza: $15
 Medium Pizza: $20
 Large Pizza: $25
 Size of pizza? (S, M, or L): l

 Pepperoni for Small Pizza: +$2
 Pepperoni for Medium or Large Pizza: +$3
 Do you want pepperoni? (Y/N): y
 Extra cheese for any size pizza: (1) +$1

 Do you want extra cheese? (Y/N): y
 Your final bill is: $29
 Thanks for ordering from Java Pizza Planet!
 Order another pizza? (Y/N): y

 Welcome to Python Pizza Planet Deliveries!
 Small Pizza: $15
 Medium Pizza: $20
 Large Pizza: $25
 Size of pizza? (S, M, or L): s

 Pepperoni for Small Pizza: +$2
 Pepperoni for Medium or Large Pizza: +$3
 Do you want pepperoni? (Y/N): s
 Extra cheese for any size pizza: (1) +$1

 Do you want extra cheese? (Y/N): n
 Your final bill is: $15
 Thanks for ordering from Java Pizza Planet!
 Order another pizza? (Y/N): n
```

Assignment Submission

1. Use pseudocode or TODO.
2. Comment your code to show evidence of understanding.
3. Attach the program files.
4. Attach screenshots showing the successful operation of the program.
5. Submit in Blackboard.