CSCI-101 Programming I

Lab 2

Log into cs.bridgewater.edu. Use the **cd** command to change your working directory to your **csci101/labs** directory in our shared repository. Use the **mkdir** command to create a directory name **lab2**. Change your working directory to the **lab2** directory.

Use **vi** to create a file named **Lab2.java**. Add code to your **Lab2.java** file so that it satisfies the following:

- Declare an instance of the **Scanner** class and store the reference to the instance in a variable named **kb**.
- Ask the user to enter 3 integers representing the lengths of a package.
- Use the Scanner to read the values into variables named **length1**, **length2**, and **length3.**
- If the value in **length1** is less than or equal to 0 or the value in **length2** is less than or equal to 0 or the value in **length3** is less than or equal to 0 then print to the screen **"Error: cannot have length less than or equal to 0"** and terminate the program by adding the following line of code in the if-block.

```
return;
```

- Compute the area of the package and store the value in a variable named **area**. Recall that the area of a rectangular package is the product of the 3 lengths of the package.
- Use the **printf** method to print to the screen **"Package area: "** followed by the value in the variable **area**.
- Declare a variable named **boxType** and initialize it to the empty string.
- Declare a variable named **cost** that can hold a decimal value and initialize it to **0.0**.
- Use the table below and the value in the variable **area** to determine the box type and store the box type in the variable named **boxType** and the cost in the variable named **cost**. If no box type is available for the package then print to the screen **"No box type is available"** and terminate the program.

Minimum Area	Maximum Area	Box Type	Cost
0	100	Small	$3.50
101	1000	Medium	$7.00
1001	10000	Large	$14.00
10001	infinity	No box type available	

- Print to the screen on a single line: **"Box type: "** followed by the value in **boxType,** a comma, and "**Cost: "** followed by the value in the variable named **cost.**

Test Your Code Thoroughly

Run your program repeatedly, using data to force your program to behave in every way possible. If you find an error, fix the error and retest.

Push Your Code to GitHub.com

Add **Lab2.java** to the staging of your repository.

```
$ git add Lab2.java
```

Commit your change to your repository on cs.bridgewater.edu.

```
$ git commit -m 'Added lab2'
```

Push your code to GitHub.

```
$ git push
```