Lab Report 02

Problem

Figuring out the price and discount for a company selling software packages in large order.

Proposed Solution

Create a program to take in the amount of packages and subtract the proper discount.

Tests and Results

```
<terminated> Lab02 [Java Application] C:\Program Files\Java\jdk-18.0.2\bin\javaw.exe  (Sep 17, 2022, 8:46:54 PM – 8:47:05 PM) [pid: 14076]
Enter the total number of packages ordered:
55
Total Purchase Amount (before discount) = $5445.0
Amount of discount = $2178.0
Total Purchase Amount (after discount) = $3267.0
```

```
<terminated> Lab02 [Java Application] C:\Program Files\Java\jdk-18.0.2\bin\javaw.exe  (Sep 17, 2022, 8:47:36 PM – 8:47:37 PM) [pid: 8160]
Enter the total number of packages ordered:
13
Total Purchase Amount (before discount) = $1287.0
Amount of discount = $257.4
Total Purchase Amount (after discount) = $1029.6
```

```
<terminated> Lab02 [Java Application] C:\Program Files\Java\jdk-18.0.2\bin\javaw.exe  (Sep 17, 2022, 8:47:54 PM – 8:48:00 PM) [pid: 10352]
Enter the total number of packages ordered:
89
Total Purchase Amount (before discount) = $8811.0
Amount of discount = $3524.4
Total Purchase Amount (after discount) = $5286.6
```

```
<terminated> Lab02 [Java Application] C:\Program Files\Java\jdk-18.0.2\bin\javaw.exe  (Sep 17, 2022, 8:48:15 PM – 8:48:19 PM) [pid: 18620]
Enter the total number of packages ordered:
-15
Invalid value for package count! Exiting the program!
```

Problems Encountered

I was not able to use system.out.println() as one and had to copy three println lines for each if statement.

Conclusions and Discussion

In this lab we learned to you math and multiple if statements in a program to calculate a subtotal after a discount is applied.

Additional Questions

1. Can a keyword be used as the name of an identifier?
   a. No they cannot be used as an identifier
2. List any 2 keywords or reserved words.
   a. Abstract
   b. short
3. What is short-circuit evaluation? Why is it useful?
   a. Skips the execution of sub-expressions as soon as a value is determined
   b. Allows for a quick execution and quicker to test.