

# Lab Report 03

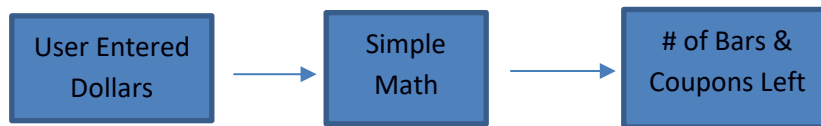
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## Problem

How many chocolate bars can someone buy with a certain amount of dollars if they get a coupon for each bar? Six coupons give one bar.

## Proposed Solution

Create a program that takes user entered number and by doing simple math outputs the number of chocolate bars the user can get and how many coupons will be left



## Tests and Results

```
<terminated> Lab03 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Sep 27, 2022, 5:00:49 PM – 5:01:40 PM) [pid: 7792]
How many dollars would you like to spend on chocolate from the vending machine?
12
You can buy 14 chocolate bars and will have 2 coupons left!
```

```
<terminated> Lab03 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Sep 27, 2022, 5:02:09 PM – 5:02:14 PM) [pid: 20124]
How many dollars would you like to spend on chocolate from the vending machine?
100
You can buy 118 chocolate bars and will have 4 coupons left!
```

```
<terminated> Lab03 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Sep 27, 2022, 5:02:42 PM – 5:02:44 PM) [pid: 18168]
How many dollars would you like to spend on chocolate from the vending machine?
-99
Invalid value for amount! Exiting the program!
```

## Problems Encountered

To me trial and error to get the math correct.

## Conclusions and Discussion

The lab taught to use math in Java and allowed for a deeper understanding of variables. To my knowledge and on what other things I have seen, this seems to be the best solution.

## Additional Questions

1. In the proposed solution section, draw a flowchart to represent your solution.

**Did it!**

2. Is this code problem free? If yes, write the generated output, if not, identify the error:

```
int j = 7, m = 5;
while ( j != 0)
{
    System.out.println( j - m );
}
```

The code first declares j as 7 and m as 5, then says that if j does not equal 0 then output what j – m equal. Since j is a non-changing variable it will loop the program within while.

```
<terminated> Lab03Question [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Sep 27, 2022, 5:14:05 PM – 5:14:15 PM) [pid: 10808]
2
2
2
2
2
2
2
2
2
2
```