

# Work on project. Stage 3/6: Estimate the number of servings

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Project: [Coffee Machine](#)

Medium 35 minutes ?

## Description

A real coffee machine never has an infinite supply of water, milk, or coffee beans. And if you input a really big number, it's almost certain that a real coffee machine wouldn't have the supplies needed to make all that coffee.

In this stage, you need to improve the previous program. Now you need to input amounts of water, milk, and coffee beans that your coffee machine has at the moment.

If the coffee machine has enough supplies to make the specified amount of coffee, the program should print "Yes, I can make that amount of coffee". If the coffee machine can make more than that, the program should output "Yes, I can make that amount of coffee (and even N more than that)", where N is the number of additional cups of coffee that the coffee machine can make. If the amount of resources is not enough to make the specified amount of coffee, the program should output "No, I can make only N cup(s) of coffee".

Like in the previous stage, the coffee machine needs 200 ml of water, 50 ml of milk, and 15 g of coffee beans to make one cup of coffee.

## Instruction

Write a program that calculates whether it will be able to make the required amount of coffee from the specified amount of ingredients.

## Examples

The program should firstly request for water, then milk, then beans, and then the number of cups.

The symbol `>` represents the user input. Note that it's not part of the input.

### Example 1

```
Write how many ml of water the coffee machine has:
> 300
Write how many ml of milk the coffee machine has:
> 65
Write how many grams of coffee beans the coffee machine has:
> 100
Write how many cups of coffee you will need:
> 1
Yes, I can make that amount of coffee
```

### Example 2

```
Write how many ml of water the coffee machine has:
> 500
Write how many ml of milk the coffee machine has:
> 250
Write how many grams of coffee beans the coffee machine has:
> 200
Write how many cups of coffee you will need:
> 10
No, I can make only 2 cup(s) of coffee
```

### Example 3

### 3 / 3 Prerequisites

- ✓ [Boolean and logical operations](#) In project 14 ↗ ✓
- ✓ [Relational operators](#) In project 14 ↗ ✓
- ✓ [Conditional statement](#) In project 14 ↗ ✓

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```
Write how many ml of water the coffee machine has:
> 1550
Write how many ml of milk the coffee machine has:
> 299
Write how many grams of coffee beans the coffee machine has:
> 300
Write how many cups of coffee you will need:
> 3
Yes, I can make that amount of coffee (and even 2 more than that)
```

#### Example 4

```
Write how many ml of water the coffee machine has:
> 0
Write how many ml of milk the coffee machine has:
> 0
Write how many grams of coffee beans the coffee machine has:
> 0
Write how many cups of coffee you will need:
> 1
No, I can make only 0 cup(s) of coffee
```


#### Example 5

```
Write how many ml of water the coffee machine has:
> 0
Write how many ml of milk the coffee machine has:
> 0
Write how many grams of coffee beans the coffee machine has:
> 0
Write how many cups of coffee you will need:
> 0
Yes, I can make that amount of coffee
```

#### Example 6

```
Write how many ml of water the coffee machine has:
> 200
Write how many ml of milk the coffee machine has:
> 50
Write how many grams of coffee beans the coffee machine has:
> 15
Write how many cups of coffee you will need:
> 0
Yes, I can make that amount of coffee (and even 1 more than that)
```

 Report a typo

 See hint

✓ Write a program

[Code Editor](#)

[IDE](#)

Java

```
1 package machine;
2 import java.util.Scanner;
3
4 public class CoffeeMachine {
5     public static void main(String[] args) {
6         Scanner sc = new Scanner(System.in);
7         System.out.println("Write how many ml of water the coffee machine has:");
8         int water = sc.nextInt();
9         System.out.println("Write how many ml of milk the coffee machine has: ");
10        int milk = sc.nextInt();
11        System.out.println("Write how many grams of coffee beans the coffee machine has: ");
12        int coffee = sc.nextInt();
13        int cup = getCups(water, milk, coffee);
14        System.out.println("Write how many cups of coffee you will need: ");
15        int order = sc.nextInt();
16        printOrder(cup, order);
17        sc.close();
18    }
19
20    public static void printOrder(int cup, int order){
21        if(cup == order){
22            System.out.println("Yes, I can make that amount of coffee (and even 1 more than that)");
23        } else {
24            System.out.println("No, I can make only " + cup + " cup(s) of coffee");
25        }
26    }
27}
```

```

21         if(cup == order){
22             System.out.println("Yes, I can make that amount of coffee");
23         }
24         else if(cup < order){
25             System.out.println("No, I can make only " + (cup) + "cup(s) of coffee");
26         }
27         else{
28             System.out.print("Yes, I can make that amount of coffee (and even " + (cup - order) + "more than that)");
29         }
30     }
31
32     public static int getCups(int water, int milk, int coffee){
33         int cup = 0;
34         while(!(water < 1 && milk < 1 && coffee < 1)){
35             water -= 200;
36             milk -= 50;
37             coffee -= 15;
38             if(water >= 0 && milk >= 0 && coffee >= 0){
39                 cup++;
40             }
41         }
42         return(cup);
43     }
44 }
45

```

✓ **Correct.**

[Install an IDE](#) to get access to powerful debugging tools which let you examine your solution step by step.

610 users liked this problem. 35 didn't like it. **What about you?**



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