

## Work on project. Stage 3/6: Enough coffee for everyone

5173 users solved this problem. Latest completion was about 1 hour ago.

Project: Coffee Machine ■ Hard ② ( 25 minutes

### Description

A real coffee machine doesn't have 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 for you.

In this stage, you need to improve the previous program. Now you will check amounts of water, milk, and coffee beans available in your coffee machine at the moment.

# 5 / 5 Prerequisites Boolean logic 20 n Else statement 171

Elif statement 16

## Objectives

Write a program that does the following:

- 1. It requests the amounts of water, milk, and coffee beans available at the moment, and then asks for the number of cups a user needs.
- 2. If the coffee machine has enough supplies to make the specified amount of coffee, the program should print "Yes, I can make that
- 3. 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.
- 4. If the amount of given resources is not enough to make the specified amount of coffee, the program should output "No, I can make only N cups of coffee".

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

### **Examples**

The greater-than symbol followed by space (> ) represents the user input. Notice that it's not the part of the input.

#### Example 1:

1 Write how many ml of water the coffee machine has: > 300 Write how many ml of milk the coffee machine has: Write how many grams of coffee beans the coffee machine has: Write how many cups of coffee you will need: 8 > 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: 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 cups of coffee

#### Example 3:

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

```
1 Write how many ml of water the coffee machine has:
       Write how many ml of milk the coffee machine has:
  4
  5 Write how many grams of coffee beans the coffee machine has:
  6
       > 0
  7 Write how many cups of coffee you will need:
   8 > 1
  9 No, I can make only 0 cups of coffee
Example 5:
  1 Write how many ml of water the coffee machine has:
  2 > 0
3 Write how many ml of milk the coffee machine has:
      > 0
   4
  Write how many grams of coffee beans the coffee machine has:
   7 Write how many cups of coffee you will need:
  8 > 0
  9 Yes, I can make that amount of coffee
Example 6:
  1 Write how many ml of water the coffee machine has:
       > 200
   3 Write how many ml of milk the coffee machine has:
  4 > 50
      Write how many grams of coffee beans the coffee machine has:
       > 15
  7 Write how many cups of coffee you will need:
  8
       > 0
  9 Yes, I can make that amount of coffee (and even 1 more than that)
Code Editor
                 IDE
                                                                                                                                Python
    1 # Write your code here
    2 number_of_coffee = int(input())
     3 water_per_cup_coffee = 200
    4 milk_per_cup_coffee = 50
    5 coffee_beans_per_cup_coffee = 15
    7 total_water = number_of_coffee * water_per_cup_coffee
8 total_milk = number_of_coffee * milk_per_cup_coffee
9 total_coffee_beans = number_of_coffee * coffee_beans_per_cup_coffee
    11 print("For 25 cups of coffee you will need:")
    12 print(f"{total_water} ml of water")
    13 print(f"{total_milk} ml of milk")
    14 print(f"{total_coffee_beans} g of coffee beans")
    15
               This problem has been changed. Reload?
                                                               Solutions (467)
```

This content was created over 1 year ago and updated 5 days ago. Share your feedback below in comments to help us improve it!

Show discussion (675)

About Support Contribute Terms How do we teach 🔠 👍

