

You have to simulate a beverage machine that can produce tea, coffee, or water. When the user specifies what she wants, the machine produces the specified cup of beverage. Each cup has a unique id. Unlike water (water has zero calories), coffee and tea may cause health problems. Thus, the beverage machine wants to keep track of the total number of cups sold for beverages that may cause health problems. You have to do this using **ONE** ArrayList. If the user wants, she can also get the beverage machine to check the amount of calories in the beverage cup she just bought. The beverage machine should check this value only for tea and coffee, and should accept only tea cups or coffee cups. The beverage machine calls the corresponding method in the beverage cup to get the calorie count. How calorie count is calculated differs between tea and coffee. Each beverage cup should also have a method to print out the type of beverage that is inside it. The user can even check the total number of tea and coffee cups produced by the beverage machine.

Here are the accepted user inputs:

0 <beverage name> – produce a beverage. <beverage name> could be tea coffee water

1 – calculate and print the calories included in the cup that was returned to customer

2 – print the number of tea+ coffee cups produced

Anything else – print invalid input

PTO

Use the following pseudo code as a starting point:

```
Public class BeverageMachineDemo{
    Psvm{
        //create a beverage machine
        // take console input
        //if 0 <beverage name>
            Get the beverage machine to produce the beverage
            print its name to console
        // If 1
            Get the beverage machine to calculate the amount of calories in the cup that it
            last produced.
            Print this value to the console
        // If 3
            Get the beverage machine to return the number of coffee+tea cups it produced
            Print this value to the console
        //if anything else
            //print "invalid input"
    }
}
```