
SpringCleaning is a program with two programmer-defined methods called `main()` and `clean()`. This program only has local variables. In `main()`, there are three prompts for "What's Dirty?" then the user can enter input. Immediately following each of the three inputs, the word or phrase that is entered is passed to `clean()` as a parameter, and `clean()` will output the following:

Scrub a dub dub, the kitchen is a mess.

Use 100 ml of soap and get it nice and clean!

The underlined word in the method gets replaced each time by the input from the most recent user input (remember, there are three prompts, so three inputs from the user, and the above output will be shown in three variations). The volume of soap is 100 ml the first time, then is reduced by 30% of the prior volume each subsequent time (some math should be done).

This is what will display in the console when the program is executed:

Welcome to Spring Cleaning.

What's Dirty? kitchen

Scrub a dub dub, the kitchen is a mess.

Use 100 ml of soap and get it nice and clean!

What's Dirty? bathroom

Scrub a dub dub, the bathroom is a mess.

Use 67 ml soap and get it nice and clean!

What's Dirty? bedroom

Scrub a dub dub, the bedroom is a mess.

Use 47 ml of soap and get it nice and clean!

1. On a separate sheet of paper, write pseudocode (remember, NO JAVA) for this program, indicating what will be done in `main()` and in `clean()`. Keep in mind that use and reuse of a method is the goal, as well as use of variables.

Here is a word bank to help you (use these terms in your pseudocode). You can use each term once or more than once.

Call method	<code>main()</code>	<code>clean()</code>	print	declare	initialize
Parameter	volume	place	instance	Scanner	processing
Prompt	import	class	method	String	integer

2. Write the method header for clean():

3. Write the line of code that reads the first input from the user and saves it as a variable.

4. Write the line of code that calls clean() and passes the input from the user as a parameter. Be thoughtful about this line – is there a returned value?

5. In this program, when working with the integer volume to calculate its new value, you may end up using this code:

```
volume = volume - volume * 0.30;
```

However, this will cause an error that is remedied by:

```
volume = (int)( volume - volume * 0.30);
```

Explain what the error is: _____

Bonus: What Math method could also fix this problem? _____

Explain the Math method you chose: _____
