How to use codingbat.com & why we use codingbat.com

LOGIN?
Get a login and password. Then, go to prefs at the top right of the page. Once in preferences, go to the bottom and add my email in the blank next to share to. Then click on the share button. Now I can monitor progress. Please keep in mind that only a true effort by you is worth your time. You will not be given credit for this as last year I found folks were copying and pasting rather than learning. This is ridiculous because this tool is very effective, very useful. So this year we will have random coding bat challenges on paper via quizzes/tests.

WHY?
1. practice coding given a prompt. very ap free-response like
2. excellent algorithm practice. if you really stay committed to codingbat your coding will improve quickly! you will see so many different ways to present a problem.
3. excellent debugging practice. they provide testcases, so it is so easy to get the practice of debugging. we all make mistakes – it is how you learn the most in the coding world.

HOW?
1. We are starting codingbat pretty early on and so a few things need to be explained. Each codingbat section requests that you finish a method (also called a function in other programming languages). Below I explain pertinent parts using this example from codingbat.com.

Java > Warmup-1 > sleepIn
prev | next | chance

The parameter weekday is true if it is a weekday, and the parameter vacation is true if we are on vacation. We sleep in if it is not a weekday or we're on vacation. Return true if we sleep in.

```
sleepIn(false, false) → true
sleepIn(true, false) → false
sleepIn(false, true) → true
```

| Go | ...Save, Compile, Run | Show Solution |

```
public boolean sleepIn(boolean weekday, boolean vacation) {
  --- YOU ADD CODE HERE ---

}
```

Look at the example above, you will notice that it says:

public boolean sleepIn(Boolean weekday, Boolean vacation)

1. all methods are "public"

2. the second word is the the type of java variable that this method will return. Since this method is of type boolean our last statement in the method will be – return someBooleanVariable. "return" is a java reserved word. It passes a variable back to the calling program. The variable it passes back must always match the type of the method. In addition you may have looping conditions or control statements that return true or false (values that Boolean variables take).

3. sleepIn is the name of this method. the user selects this name but codingbat handles the header definition for us, so we just have to obey.

4. The parenthesis provide us the name and type of the variables we will use in writing the code. These variables are called parameters. They are necessary for the algorithm you will write.

5. Lastly, note the testcases. They tell you that given certain circumstances (values passed in to the method in the parameter variables), you should write code that gives the proper responses. More testcases popup when you run it. As you work, you will get better at predicting testcases that are necessary.

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