Some guidelines for naming identifiers (variables, constants, etc) and formatting your code.
Naming Identifiers (I)

There are some Java-enforced rules like...

- The first character must be a letter, the underscore or a dollar sign.
- Names are CaseSensitive
- There are reserved words that you cannot use (such as `if`, `else`, `class`, etc.)
- Names cannot contain certain special characters (such as `-`, `%`, `+`, `&`, `!`, etc.)
Naming Identifiers (II)

There are naming "conventions" that we want you to follow like…

– Don't start a name with a $ (this is usually an indication of a system-level identifier).
– Don't differ identifiers JUST by CasE.
– Use meaningful names (eg: the name should express what is being held there).
– Use English words (at least when coding here).
– This isn't Twitter 😊 so don't go to crazy dropping vowels and consonants.
– Use "Camel Case" formatting.
"Camel Case"

- Your variable names and method names start with lower case letters.
- Your class and interface names start with upper case letters.
- Each word other than the first word starts with an upper case letter.
  ```java
  int myFirstInteger;
  public class MyFirstClass {
  ```
- Constants are ALL UPPERCASE with underscores between words.
  ```java
  final int DAYS_IN_A_WEEK = 7;
  ```
Speaking of CONSTANTS…

• If there is a value that we will be using that will never have to change while our program is running, it should really be stored in a meaningful CONSTANT.

• Even if you only plan to use it ONE TIME we want you to do this.

• Even if it is a simple "flag" condition (type 1 for cat, type 2 for dog, …) we want named constants like

```java
final int CAT_CHOICE = 1;
...
if (userInput == CAT_CHOICE) {
    ...
```
Other formatting conventions…

• Use placement of braces `{ }` as you have seen in the posted full examples.

• Use indenting similar to what you have seen in my posted examples.
  – If in doubt, Eclipse can help you if you highlight your code and then press `Control+I` (it will autofix your indentation).

• Don't have any lines that are longer than 80 characters long (that includes spacing).
  – This is in part because we need to be able to print your projects for parts of grading.
Which are **valid** variable names?

<table>
<thead>
<tr>
<th>For</th>
<th>success%</th>
</tr>
</thead>
<tbody>
<tr>
<td>starting_val</td>
<td>2day</td>
</tr>
</tbody>
</table>