

Code Review of F2

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1. The below attached code part is leading to a redundancy factor as PI value is going to be same because actual parameters 100,99 is passed to a calling function which is fixed. So why not to follow a **singleton pattern**, which will calculate the value of PI if only required. In conclusion, instead of writing this code (Fig1) in every file, simply refactor the code by calling `PIAve.getValue()`; where `getValue` is a method which checks whether the PI value is already calculated, if yes then simply return else call the `calcPI()` method and return value.

```
9      +      static final double PI;
10     +
11     +      static {
12     +          PI = PIAve.calcPI(100, 99);
13     +      }
14     +
```

2. Avoid Hard Coding Value, create a constants file and register all constants value in that file.

```
8      +      * @author Nirav Patel
9      +      */
10     +      public class PIAve {
11     +
12     +          public static DecimalFormat d16 = new DecimalFormat("0.0000000000000000");
```

Himansipatel 2 hours ago • edited ▼

Avoid HardCoding Value, create a constants file and register all constants value in that file.

For example:

```
class Constant{
public static final String DECIMAL_FORAMT_VALUE = "0.0000000000000000";
}
```

3. Proper naming convention to follow.

```
15 + static {  
16 +     PI = PIAve.calcPI(100, 99);  
17 + }  
18 +  
19 + static double tan(double i) {
```



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Missing JavaDoc comment and what is i?

A proper name could be given to convey what value the parameter is going to receive for instance, it could have been an angle in degree or radian.

4. For the validator.java, it validates whether the input and output is in valid range or not, it checks for the different condition and prints the same message, which can be combined in single if condition by making use of logical OR condition.

```
14 + * This method validates the range of the input.  
15 + * @param valueofInput input given by the user.  
16 + * @return return true if input is in range else return false  
17 + */  
18 + public static boolean affirmInputRange(double valueofInput) {  
19 +     boolean result = true;  
20 +     if (valueofInput > Double.MAX_VALUE) {
```



Himansipatel 2 hours ago



What is need of nested if-else here? It could be as:

```
if (valueofInput > Double.MAX_VALUE || valueofInput < -Double.MAX_VALUE) {  
    result = false;  
}
```



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