

AP CS A 2009
Programming Assignment #1: Song (10 points)
Due Wednesday, September 23rd, 2009, 11:30 PM

Thanks to Marty Stepp and Stuart Reges from UW

Program Description:

This program tests your understanding of static methods and `println` statements. Write a Java class called `Song` in a file named `Song.java`. (Use exactly this file name, including identical capitalization.) A *cumulative song* is one where each verse builds upon previous verses. For this assignment, you will write a program that outputs the following cumulative song created by UW instructors:

```
Hey homies, my code is gonna rock this place
With a method named main and a curly brace
I put a semicolon at the end of each line
You haters never seen code that looked so fine

Hey homies, my code is gonna rock this place
With a method named main and a curly brace
jGrasp loves my code, no need to debug
I can rap in Java until it unplug
I put a semicolon at the end of each line
You haters never seen code that looked so fine

Hey homies, my code is gonna rock this place
With a method named main and a curly brace
The first time I try, my code compiles
Lost a point for style cause my comments are vile
jGrasp loves my code, no need to debug
I can rap in Java until it unplug
I put a semicolon at the end of each line
You haters never seen code that looked so fine

Hey homies, my code is gonna rock this place
With a method named main and a curly brace
Got help from Ms. Martin and it was swell
But I didn't need it cause I code so well
The first time I try, my code compiles
Lost a point for style cause my comments are vile
jGrasp loves my code, no need to debug
I can rap in Java until it unplug
I put a semicolon at the end of each line
You haters never seen code that looked so fine

Hey homies, my code is gonna rock this place
With a method named main and a curly brace
I got full credit on external correctness
Hey playa check this, my code eats yours for breakfast
Got help from Ms. Martin and it was swell
But I didn't need it cause I code so well
The first time I try, my code compiles
Lost a point for style cause my comments are vile
jGrasp loves my code, no need to debug
I can rap in Java until it unplug
I put a semicolon at the end of each line
You haters never seen code that looked so fine

<< your custom 6th verse goes here >>
```

The first five verses printed by your program must **exactly** reproduce the output at left. This includes identical wording, spelling, spacing, punctuation, and capitalization.

The last verse of your song (the final bold part in `<< >>`) may print any text you like. Creative verses submitted may be shown in class anonymously at a later date. The only restrictions on your custom verse are the following:

- The verse must not be identical to another verse or consist entirely of text from earlier in the song.
- The text of the verse should not include hateful, offensive, or otherwise inappropriate speech.

Part of the challenge of this assignment lies in recognizing the structure and redundancy of the song and improving the code using static methods.

You should not place any `println` statements in your `main` method. (It is okay for `main` to have empty `println` statements to print blank lines.) Instead of printing in `main`, use static methods for structure and eliminating redundancy.

You should use only one `println` statement for each distinct line of the song (other than blank lines). But a method that prints just one line is not good style. Instead, identify groups of lines that appear in multiple places in the song and create methods to represent those groups. There is a general cumulative structural redundancy to the song that you should eliminate with your methods. As a point of reference, my solution to this program has 12 methods other than `main` and is around 90 lines long including comments and blank lines. This is just a rough guideline; you do not have to match this exactly.