Problem Set One

AP Computer

Science

Unit 1 - Methods

Instructions

Create a Java Project called **LastNameFirstNamePS1**. Within that project, create a class called **Exercises**. Be sure that it has a main method. All your responses will go in that class.

Your work is due the day of the unit exam, but you are expected to answer the questions over the course of the unit, as you learn the material. The dates are noted on each question.

Scoring

You may score up to 6 points for each question.
-2 pts: it works
-2 pts: properly uses new techniques
-2 pts: follows the style guide (see below)

Submission

Zip the file and submit it through the Google Classroom page.. Be sure the zip file is named **LastNameFirstNamePS1**. Visit the class website for further instructions.

Style Guide

General

- -Place each statement on its own line.
- -Use spaces and indentation to make code legible.
- -Use comments to explain the purpose of complicated code.

Naming Conventions

- -Classes: Start with a capital letter and capitalize every word that follows. Ex: `ClassName`
- -Methods: Start with a lowercase letter and capitalize every word that follows. Ex: `methodName`

Methods

- -Use static methods to break your program into reusable pieces to reduce redundancy.
- -Avoid trivial methods that do not accomplish much.
- -Leave a blank line between methods.
- -Pairs of curly braces should be easily identifiable.

Printing

- -For a blank line, use `System.out.println();` not `System.out.println("");`
- -To print text on the same line, only use one print statement.
- -Use `println()` rather than including `\n` at the end of a `print()` statement.

Problems

1.

Write your code in the main method of your class underneath this comment: //Exercise 1

Write code that prints the following to the console:

```
//This is not a comment.
“This isn’t a comment, either.”
```

Optional further exercises: Practice-It: 1.10 - Shaq, 1.11 - downwardSpiral

2.

Write your code in the main method of your class underneath this comment: //Exercise 2

Write code that prints an ASCII Art version of your name to the console.

Optional further exercises: Practice-It: 1.12 - DoubleSlash, 1.16 - withoutPrintStatements

3.

Write your code in methods below the main method. Use comments to identify them as part of exercise 3. Call the methods within the main method under the comment //Exercise 3

Create the following image. Use methods to simplify your program as much as possible. Remember to give your methods good names following the style guide.

```
/***|***\
|       |
|       |
|  /\   |
+++++++++
  HOME
+++++++++
  SWEET
/***|***\
|       |
|       |
|  /\   |
+++++++++
  HOME
*********
+++++++++
*********
```

Optional further exercises: Practice-It: 1.7 - Mantra, 1.8 - Stewie2, 1.10 - Egg2