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HW1

Problem 0

- **What is the difference between an interpreter and a compiler?**
  - Interpreter reads a single line of code at one time while compiler reads the whole file. For example, Java is a compiler whereas Python is an interpreter.
- **Explain the compilation process.**
  - Compiler reads the source code (high-level languages such as C, C++, and Java) and translates it into a machine language —only if the source code does not contain any error.
- **What is the Java Virtual Machine?**
  - Java Virtual Machine enables the computers, such as PC or laptop, to read and execute Java files.

Problem 1

1. Add **/*** in the first line and ***/** in the second line.
2. clss -> **class**
3. HelloWorld -> **Hello** (The file name has to match the class name)
4. Add **{** in third line
5. Add **args** inside (String[])
6. print -> **System.out.println**
7. (Hello world!") -> (**"Hello world!"**)
8. Add **;** at the end of the print line

Problem 2

- File Name: **hw1_p2.java**
- Use System.out.print**ln**(); to print each elements in separate lines.

Problem 3

- File Name: **hw1_p3.java**

- Use scanner to get input from the user.

- When user suggests two integers.

- Calculate addition, subtraction, etc and display the results.

- For division, arbitrarily convert one integer to double to facilitate division process (result should be in floating number for indivisible numbers).

Problem 4

- File Name: **hw1_p4.java**

- Use scanner to get input from the user.

- The user should give his or her weight in pounds and height in inches.

- Convert them in to kg and meters.

  - Declare final double variable for unit conversion and execute the conversion.

- Calculate BMI and display it for user.