Payara Code Puzzle #1

(Don't worry – it's not assessed!)

Hi,

This is the first in a small series of code-based puzzles being released fortnightly for you to solve, or maybe just ponder!

In most programming languages (Java being no exception), comparing decimal values can produce strange results. What do you think the following statement would print to the terminal?

System.out.println(0.7 + 0.1);

a) 1
b) 0.8
c) 0.8000000000000000
d) 0.7999999999999999

To see the answer and tweak the code, visit https://ideone.com/HwjGRz. To find out more about floating point precision, use this link as a starting point.

How would you go about avoiding these precision errors in your code? You can send your solution to this follow-up question to mycah.banks@payara.fish.

You're not expected to answer – this is just for those who want to appease their insatiable thirst for knowledge!

Sincerely,

Matt
Software Engineer Apprentice
Payara Services Ltd.