



Exercises 3

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5/5 points (graded)

ESTIMATED TIME TO COMPLETE: 5 minutes

Note that you will have to answer all questions before you can click the Check button.

1. True or False? A stored program computer is designed to compute precisely one computation, such as a square root, or the trajectory of a missile.

☐ True

☒ False



2. True or False? A fixed program computer is designed to run any computation, by interpreting a sequence of program instructions that are read into it.

☐ True

☒ False



3. A program counter

☐ counts the number of primitive operations executed by the program.

☐ counts the number of primitive operations comprising a complex operation.

☒ points the computer to the next instruction to execute in the program.

☐ remembers how many times a program has been executed.



4. What does it mean when we say that "the computer walks through the sequence executing some computation"?



- ☐ The computer tests each instruction to ensure it will not harm the circuitry.
- ☐ The computer executes the instructions in strict, linear sequence, just like walking in a straight line.
- ☒ The computer executes the instructions mostly in a linear sequence, except sometimes it jumps to a different place in the sequence.
- ☐ The computer slowly executes instructions so that we can follow its progress, rather than running a program at full speed.



5. True or False? In order to compute everything that is computable, every computer must be able to handle the sixteen most primitive operations.

- ☐ True
- ☒ False



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? Exercise 3, Question 4 <u>Does the computer jump to a different place only when it is told to do so, or does this happen because of an error?</u>	5
💬 counting operations <u>I used to think that the CPU operated the counting operations.</u>	1
💬 Exercise 3 question 3 <u>explain please</u>	8
? Unclear response <u>I don't understand the response to the third question. Maybe it is my level of English that affects my understanding of the question, but...</u>	14
? Question 3. A program counter. <u>My understanding of a program counter is that it simple counts how many times a certain operation has been completed. From my limi...</u>	8
? What are primitives? <u>Is it okay to understand primitives as "the building blocks of a programming language (basic operations) whereby the computer can do ...</u>	10
? Release Dates of Material <u>Problem Set 1 is due on Jun 18. Does this mean that the next set of materials (lectures and finger exercises) will be released after Jun 18?</u>	2

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