MITx: 6.00.1x
Introduction to Computer Science and Programming Using Python

Exercises 3

Exercises 3

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

Submit

Exercises 3

Topic: Lecture 1 / Exercises 3

Hide Discussion

Add a Post

Show all posts by recent activity

What is the reasoning behind Q5?	I got the right answer. However, my argument for choosing 'false' was that even if a comput...	7
Question 4 - Programs do not jump without a reason	Yet the answer goes on like: *"a program executes instructions **mostly** in a linear seque...	5
Interpreter (or not)?	I think the program the lecturer describes as an interpreter is more commonly described as ...	4
Question 4 is confusing	Is there any rhyme or reason to the jumping around to non-linear sequencing? That seems ...	23
First question is very badly worded	The instructional design on the first question makes it a language test, not a tesat of unders...	7
To instructors (moderators)	Hello there, Given that the Discussions comments here are similar to those in a classroom, I ...	1