**1.Did you get all that? Let's check with a quick question!**

Why do we need to learn the syntax and semantics of a programming language?



To be able to easily switch to a different programming language



So that we know which part is the subject and which one is the predicate



To allow us to clearly express what we want the computer to do

**Correct**

You nailed it! Knowing the syntax and understanding the semantics of a programming language allows us to tell the computer what we want it to do.

To allow us to clearly express what we want the computer to do

is selected.This is correct.

You nailed it! Knowing the syntax and understanding the semantics of a programming language allows us to tell the computer what we want it to do.



To understand why our computer crashes

**2.Let's check that this all made sense with a quick question!**

What’s automation?



The process of telling a computer what to do



The process of installing traffic lights



The process of getting a haircut



The process of replacing a manual step with one that happens automatically

**Correct**

Right on! By replacing a manual step with an automatic one we create automation that helps us reduce unnecessary manual work.

**3.Which of the following tasks do you think are good candidates for automation? Check all that apply.**



Investigating reports that customers are having difficulty accessing your company's external website

**Un-selected is correct**

Investigating reports that customers are having difficulty accessing your company's external website

is not selected.This is correct.



Installing software on laptops given to new employees when they are hired

**Correct**

Right on! Installing and configuring software is a task that can be automated. Ensuring that everyone gets the exact same setup and reducing the amount of manual work needed for each new employee.

Installing software on laptops given to new employees when they are hired

is selected.This is correct.

Right on! Installing and configuring software is a task that can be automated. Ensuring that everyone gets the exact same setup and reducing the amount of manual work needed for each new employee.



Designing a configuration management system for deploying software patches

**Un-selected is correct**

Designing a configuration management system for deploying software patches

is not selected.This is correct.



Periodically scanning the disk usage of a group of fileservers

**Correct**

You nailed it! Scanning the disk usage is a task that can be easily automated. By letting the computer do it, you won't have to worry about forgetting to do it whenever it's needed.

**PRACTICE QUIZ • 25 MIN**

**Practice Quiz: Introduction to Programming**

**Submit your assignment**

Try again

**Receive grade**

**TO PASS**80% or higher

**Grade**

80%

View Feedback

We keep your highest score

Practice Quiz: Introduction to Programming

Practice Quiz • 25 min

**Congratulations! You passed!**

**TO PASS**80% or higher

Keep Learning

**GRADE**

80%

**Practice Quiz: Introduction to Programming**

**TOTAL POINTS 5**

1.Question 1

What’s a computer program?



A set of languages available in the computer



A process for getting duplicate values removed from a list



A list of instructions that the computer has to follow to reach a goal



A file that gets copied to all machines in the network

**Correct**

You nailed it! At a basic level, a computer program is a recipe of instructions that tells your computer what to do.

**1 / 1 point**

2.Question 2

What’s the syntax of a language?



The rules of how to express things in that language



The subject of a sentence



The difference between one language and another



The meaning of the words

**Correct**

Right on! In a human language, syntax is the rules for how a sentence is constructed, and in a programming language, syntax is the rules for how each instruction is written.

**1 / 1 point**

3.Question 3

What’s the difference between a program and a script?



There’s not much difference, but scripts are usually simpler and shorter.



Scripts are only written in Python.



Scripts can only be used for simple tasks.



Programs are written by software engineers; scripts are written by system administrators.

**Correct**

You got it! The line between a program and a script is blurry; scripts usually have a shorter development cycle. This means that scripts are shorter, simpler, and can be written very quickly.

**1 / 1 point**

4.Question 4

Which of these scenarios are good candidates for automation? Select all that apply.



Generating a sales report, split by region and product type

**Correct**

Excellent! Creating a report that presents stored data in specific ways is a tedious task that can be easily automated.



Creating your own startup company



Helping a user who’s having network troubles

**This should not be selected**

Not quite. Designing an automated process which can accurately troubleshoot a wide variety of problems is a highly complex operation, requiring very precise feedback as to the nature of the problem. Customer support is something that's best left to humans.



Copying a file to all computers in a company

**Correct**

Nice work! A task like copying files to other computers is easily automated, and helps to reduce unnecessary manual work.



Interviewing a candidate for a job

**This should not be selected**

Not quite. Finding the best candidate for a job is something that needs to be done by humans. There are too many intangible qualities that cannot be programmed into a decision-making structure, besides just checking boxes for needed minimal qualifications.



Sending personalized emails to subscribers of your website

**Correct**

Great job! Sending out periodic emails is a time-consuming task that can be easily automated, and you won't have to worry about forgetting to do it on a regular basis.



Investigating the root cause of a machine failing to boot

**0 / 1 point**

5.Question 5

What are semantics when applied to programming code and pseudocode?



The rules for how a programming instruction is written



The difference in number values in one instance of a script compared to another



The effect the programming instructions have



The end result of a programming instruction

**Correct**

Nice job! Like human language, the intended meaning or effect of words, or in this case instructions, are referred to as semantics.

**1 / 1 point**