**Week 1 Quiz**

## Practice Quiz: Introduction to Programming

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**

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**

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**

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



**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



**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

**1 / 1 point**

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.

## Practice Quiz: Introduction to Python

Question 1

Fill in the correct Python command to put “My first Python program” onto the screen.



1

print("My first Python program")

**Correct**

Way to go! You've given the computer the correct instruction

in Python to do what you’ve asked of it.

**1 / 1 point**

Question 2

Python is an example of what type of programming language?



Client-side scripting language



Machine language



**General purpose scripting language**



Platform-specific scripting language

**Correct**

You got it! Python is one of the general purpose scripting languages that are widely used for scripting and automation.

**1 / 1 point**

Question 3

Convert this Bash command into Python:



1

**print('Have a nice day')**

**Correct**

Great job! You used the correct syntax, with proper

punctuation, to make this code work in Python.

**1 / 1 point**

Question 4

Fill in the correct Python commands to put “This is fun!” onto the screen 5 times.



1

2

3

**for i in range(5):**

**print("This is fun!")**

**Correct**

Well done! You remembered how to specify the range in

Python, and have the "print" command do the work.

**1 / 1 point**

Question 5

Select the Python code snippet that corresponds to the following Javascript snippet:



1

2

3

4

for (let i = 0; i < 10; i++) {

console.log(i);

}





1

2

3

4

5

6

for a in 1..5 do

puts i

end





1

2

3

4

5

for (int i = 0; i < 10; i++)

{

print()

}





1

2

3

4

5

for (i in x)

{

print(i)

}





1

2

3

**for i in range(10):**

**print(i)**

**Correct**

Right on! In Python, we use range() to initiate for loops.

## Practice Quiz: Hello World

Question 1

What are functions in Python?



Functions let us to use Python as a calculator.



**Functions are pieces of code that perform a unit of work.**



Functions are only used to print messages to the screen.



Functions are how we tell if our program is functioning or not.

**Correct**

Right on! Python functions encapsulate a certain action, like outputting a message to the screen in the case of print().

**1 / 1 point**

Question 2

What are keywords in Python?



**Keywords are reserved words that are used to construct instructions.**



Keywords are used to calculate mathematical operations.



Keywords are used to print messages like "Hello World!" to the screen.



Keywords are the words that we need to memorize to program in Python.

**Correct**

You got it! Using the reserved words provided by the language we can construct complex instructions that will make our scripts.

**1 / 1 point**

Question 3

What does the print function do in Python?



The print function generates PDFs and sends it to the nearest printer.



The print function stores values provided by the user.



**The print function outputs messages to the screen**



The print function calculates mathematical operations.

**Correct**

You nailed it! Using the print() we can generate output for the user of our programs.

**1 / 1 point**

Question 4

Output a message that says "Programming in Python is fun!" to the screen.



1

**print("Programming in Python is fun!")**

**Correct**

Great work! We're just starting but programming in Python

can indeed be a lot of fun.

**1 / 1 point**

Question 5

Replace the \_\_\_ placeholder and calculate the Golden ratio: \frac{1+\sqrt{5}}{2}21+5​​.

Tip: to calculate the square root of a number x*x*, you can use x\*\*(1/2).



1

2

**ratio = (1+5\*\*(1/2))/2**

**print(ratio)**

**Correct**

Awesome job! See how we can use Python to calculate complex

values for us.