**Presentation Notes:**

1. What are the four functions of a computer program listed on the lesson slide?
   1. It controls the functions of the hardware of a computer system.
   2. It makes decisions about how input devices affect output devices.
   3. It changing the program changes the function of the computer hardware.
   4. Computer programs can control more than just traditional computer systems
2. Provide an example of a computer input that is not listed on the lesson slide.

* An example of an input device is a microphone which can be used to record sound.

1. Provide an example of a computer output that is not listed on the lesson slide.

* An example of a output device is a speaker, which can be used to hear audio created by various programs on a computer.

1. Provide another example of how a computer input affects a computer output that is not listed on the lesson slide.

* If you search up a video on a search engine and click the play button (input device), it will send a signal to the speakers to play audio for the selected video.

1. Provide an example of how changing the program changes how computer inputs affect computer outputs that is not listed on the lesson slide.

* If you are typing out a report on Adobe Premier Pro and press *crt + k* to an edit to the timeline then switch to another program it will not be the same shortcut because the two programs are completely different.

1. What are some examples of devices that are not traditional computers but that make use of computer programs?
   1. Industrial Robots
   2. Cars
   3. Kitchen Appliances
   4. Social Media Bots
   5. Electronic Billboards
2. Provide another example of a device that makes use of a computer program that is not listed on the lesson slide.

* Smart devices are small computers that can control various functions.

1. What is another term for a computer program?

* Computer software

1. What are some ways that computer software is different from computer hardware?

* Computer software uses logic which is flexible and easily changed while hardware uses physical devices which are hard to change.

1. How are computer programs written?

* Computer programs are written in plain text using a keyboard and editor and can be stored in a file to be used later.

1. Why are computer programs composed of many lines of computer code?

* Complex programs require many lines of code to run, without these additional lines of code the program would not function correctly or not at all.

1. List some examples of different computer languages.
   1. Python
   2. C/ C Sharp
   3. Java
   4. SQL
2. List some of the benefits of the Python computer language.
   1. Professional coding language.
   2. Good for small programs
   3. Good for beginners
   4. Language of choice for 1st year university courses
3. Once you finish this course, how could you answer someone who asks you "Do you know how to program in Java?"

* I could answer “yes I could probably because all concepts are the same in all coding languages”.

1. Could you use Microsoft Word to write a computer program? Explain.

* Programs can be written in any text editors, including Microsoft Word.

1. What does IDE stand for?

* IDE stands for Integrated Development Environment.

1. What are some features of an Integrated Development Environment?
   1. Provides extra supports and tools for creating and maintaining programs
   2. Color coding of keywords
   3. Indentation and completion control
   4. Error Checking
   5. Runtime support and debugging.
2. What are some factors to consider when choosing an Integrated Development Environment?
   1. How well does it support your chosen language?
   2. Is it web based or a download install?
   3. Other factors
3. What is the name of the IDE that we will be using to create our Python programs?

* Repel.it

1. What version of Python will we be using?

* 3.7.3

1. Draw a sketch of the Repl interface showing the three work areas (panels)
   1. Label each panel
   2. Summarize the function of each panel

**Student Questions:**

1. Create an account for yourself at www.repl.it
   1. Review the "Terms of Service" to verify that you can legally use this service.
   2. Follow the previous discussed guidelines regarding use of personal information
2. List the part of the "Terms of Service" that verifies that you can legally use this service.

* The terms of service of repl.it state that the user is allowed to use this service after the user complies and accepts the terms of service. And if you do not comply you do not have permission to use the service.

1. Explain some of the rights that you give away to Repl.it regarding content you create using their service?

* Some of the rights you give up to Repl.it can include, not being able to copy, reproduce, distribute, transmit, broadcast, display, sell, license, or otherwise exploit any content and lose the rights you have against Nonreason when complying with the terms of service.

1. Create a new Python repl and call it "Hello World".
2. Copy and paste the following program into the program panel (white area)

userName = input("Please type your name: ");

print("Hello", userName, "welcome to Python!")

1. Run the program to see what it does. (If necessary, fix the quotation marks so it runs properly.)
   1. Explain how the program works.
   2. Explain how you fixed the program (if necessary)

A. The program inputs a statement which is “Please type your name” and after you type your name in the programs inputs your name into the statement ("Hello", userName, "welcome to Python!").

1. Try using the console pane (black area) to perform some simple calculations and run some one-line programs.
   1. Summarize some of your calculations.

A: After some investigating I figured out python has built in BEDMAS.

1. Try using the file management pane to add some files and folders to your repl.
   1. Summarize some of your additions.

A: In my own time I reengineered the program to ask “what is 1 + 1” and to display the answer typed into the right box.