**Presentation Notes:**

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

Trackpad, on laptops.

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

Speaker systems, for audio output.

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

Changing the volume slider on the computer changes the level of volume in the headset or speakers.

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

Changing from an editing software to a YouTube video.

1. What are some examples of devices that are not traditional computers but that make use of computer programs?
   1. Game systems
   2. Gamepads
   3. TV
   4. Kitchen appliances
2. Provide another example of a device that makes use of a computer program that is not listed on the lesson slide.

Remote control cars, and other remote control toys.

1. What is another term for a computer program?

Computer software

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

Software uses logic which is flexible and easily changed, hardware uses physical devices which are hard to change.

1. How are computer programs written?

They are written in plain text. They are created using keyboard and editor.

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

A complex command might be made of a dozen logical program statements. A complete computer program can be made of thousands of lines of computer code.

1. List some examples of different computer languages.
   1. C / C+ for engineering
   2. Java for web application development
   3. COBOL / SQL for business
   4. Python
2. List some of the benefits of the Python computer language.
   1. Professional language with a large user base
   2. Good for prototyping small programs
   3. A good beginner language
   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?"

Programming concepts are the same in all languages, when you learn how to program using one language, you can use any coding language.

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

Programs can be written using almost any text editor, but they lack support to make programming more efficient.

1. What does IDE stand for?

Integrated Development Environment.

1. What are some features of an Integrated Development Environment?
   1. Colour coding of keywords
   2. Indentation and completion control
   3. Error checking
   4. 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?

We will be using Repl.it Development Environment

1. What version of Python will we be using?

We will be using version 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 TOS states our access and use of the services is conditioned upon our acceptance of and compliance with the terms. They apply to all visitors, users and other to want to access or use repl.

1. Explain some of the rights that you give away to Repl.it regarding content you create using their service?
2. Create a new Python repl and call it "Hello World".
3. 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.

The red text is what the program says to you, and it asks you to type your name out.

* 1. Explain how you fixed the program (if necessary)

Did not have to fix it.

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