**Presentation Notes:**

1. What are the four functions of a computer program listed on the lesson slide?
   1. A Computer Program controls the hardware of a computer system.
   2. It 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.

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

An input device not listed as an example on the lesson slide is a microphone.

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

An output device not listed as an example on the lesson slide is a speaker.

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

Connecting a laptop to a speaker using an aux cord to amplify sound.

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 program from Paint Tool Sai, to Adobe After Effects.

1. What are some examples of devices that are not traditional computers but that make use of computer programs?
   1. Refrigerator
   2. Cars
   3. Industrial Robots
   4. Toasters
   5. Home Television Boxes
2. Provide another example of a device that makes use of a computer program that is not listed on the lesson slide.

A movie box was not listed on the lesson slide.

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?

Computer programs are written in Plane text

Using different computer languages, depending on the program.

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

They are composed of thousands of line of computer code, since complex commands may require dozens of logical program statements

1. List some examples of different computer languages.
   1. C/C+ for Engineering
   2. Java for Web Application
   3. COBOL/SQL for Business
   4. Python
2. List some of the benefits of the Python computer language.
   1. Is a “professional” language with a large user base
   2. Is good for prototyping small programs
   3. It is a good beginner language
   4. It is the 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?"

You would tell them you’ve never used Java, but you’d know the program concepts for the language used in Java

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

Yes, you could, since it’s a text tool. But it wouldn’t be effective and efficient.

1. What does IDE stand for?

Integrated Development Environment.

1. What are some features of an Integrated Development Environment?
   1. Color Coding of Words
   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?

The IDE we will be using is Repl.it

1. What version of Python will we be using?

Do not use Python 2.7, we will be using Python 3.7

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.
      1. Yes, I 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.
   1. Your access to and use of the service is conditioned upon your acceptance of and us compliance with these Terms. These Terms apply to all visitors, users and others who wish to access or use the service.
3. Explain some of the rights that you give away to Repl.it regarding content you create using their service?
   1. Agreeing to no use the service for commercial uses, unless you obtain Neoreason’s prior, written approval.
   2. To not alter or modify any part of the Service
   3. To not access Neoreason’s content through any technology or means other than the pages of the service itself or other explicitly authorized means that Neoreason may designate
   4. To not use the Service to tamper or attack other websites, services, and individuals
4. Create a new Python repl and call it "Hello World".
5. 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.
      1. The program works by writing a command prompt in the executable area (white space), and then the user executes the command in the control panel (black space). In this instance, by writing a name, the program runs a command providing the user with the name they put and the text they had want to be printed.
   2. Explain how you fixed the program (if necessary)
      1. Didn’t need to fix it
2. Try using the console pane (black area) to perform some simple calculations and run some one-line programs.
   1. Summarize some of your calculations.
      1. The control panel can act as a calculator, so for example if you were to input 5544\*5. The control panel would then do the calculation, and provide the answer in the next line of text (27720).
3. Try using the file management pane to add some files and folders to your repl.
   1. Summarize some of your additions.
      1. I created mew files under the name dsa.