**Presentation Notes:**

1. What are the four functions of a computer program listed on the lesson slide?
   1. A computer program can control how hardware works on a computer
   2. It decides what happens between input and output devices
   3. Using different programs change how the computer functions
2. Provide an example of a computer input that is not listed on the lesson slide.

* A key on a keyboard is an input device

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

* An LED is an output device

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

* On RGB keyboards, you can set setting like when you press a key, light up the keyboard

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 keybinds on PC games cause them to do different things

1. What are some examples of devices that are not traditional computers but that make use of computer programs?
   1. Smart Homes
   2. Amazon Echo/Google Home
   3. Roller Coasters/Amusement Park Rides
   4. Street Lights
   5. Chargers
2. Provide another example of a device that makes use of a computer program that is not listed on the lesson slide.

* Amazon Echo/Google Home

1. What is another term for a computer program?

* Another term used is “Software”

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

* Software is installed on the PC and cannot physically affect the PC
* Hardware is the physical PC and installation on it

1. How are computer programs written?

* in computer languages utilising code, such as Phython, C++, java, or SQL

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

* To perform different functions depending on what line of code is being run

1. List some examples of different computer languages.
   1. java
   2. C++
   3. SQL
   4. HTML
2. List some of the benefits of the Python computer language.
   1. A lot of help on the internet
   2. Can be used to learn other languages easier
   3. Is one of the most popular
   4. Can be used to create simple programs
3. Once you finish this course, how could you answer someone who asks you "Do you know how to program in Java?"

No, but I can learn how to pretty easily.

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

Yes, but it is complicated and not worth the time and effort.

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?

Repl.it

1. What version of Python will we be using?

Python 3.7.4

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.

“**Service**

We provide users with a hosted environment to practice coding and to build and deploy software and web servers, made available through our Service.”

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

* You must pay to make your repl.it private

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.

It asks for your name and then welcomes you to Phython with a hello

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

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.

10x10 = 100

60x2 = 120

10+10=20

12343\*12343 = 152349649

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