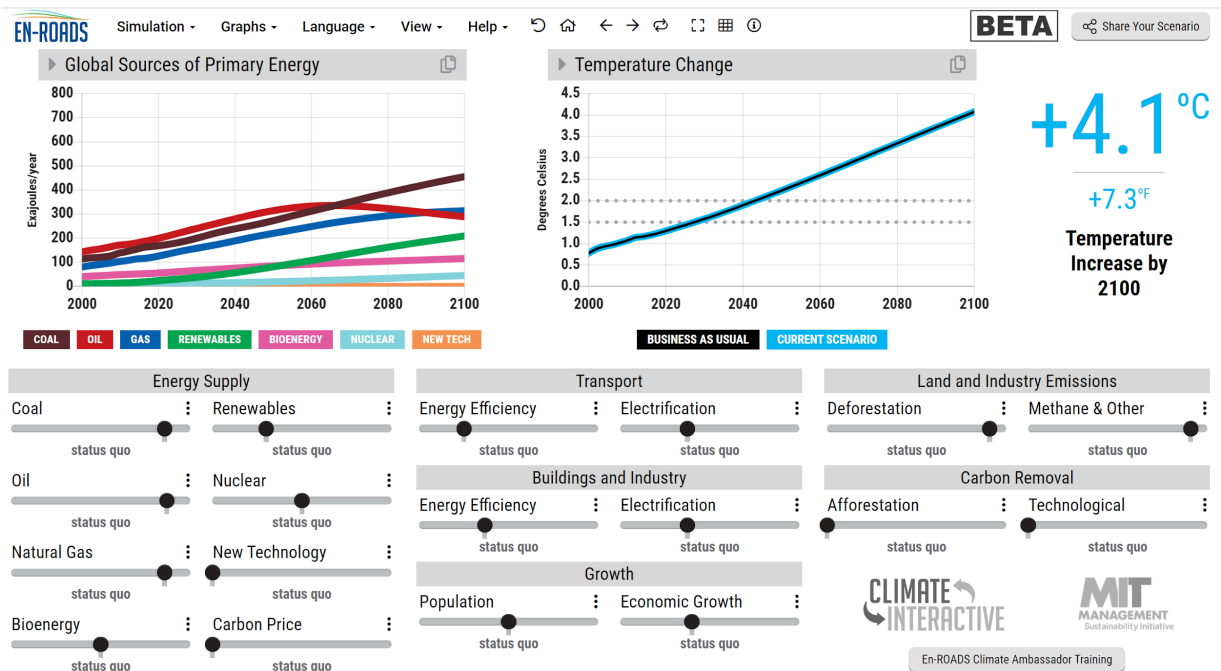


Lesson 1 - Introduction to Coding & Online Compilers

Giving a machine instructions in a language so it can execute actions

Climate Simulators & Coding

There are many different coding languages such as Python, C++, and Matlab that might sound familiar. Using a simulator, data can be inputted in a coding language to then be interpreted by a machine. [En-roads](#), developed by Climate Interactive, Ventana Systems and MIT Sloan, is an example of a climate change simulator that allows you to explore the effects of different scenarios by allowing you to input policy changes and assess the impacts of your decisions with live feedback. It is a good example of how coding can be used to better understand our world, the consequences of our decisions on Earth's climate system, and potential solutions.

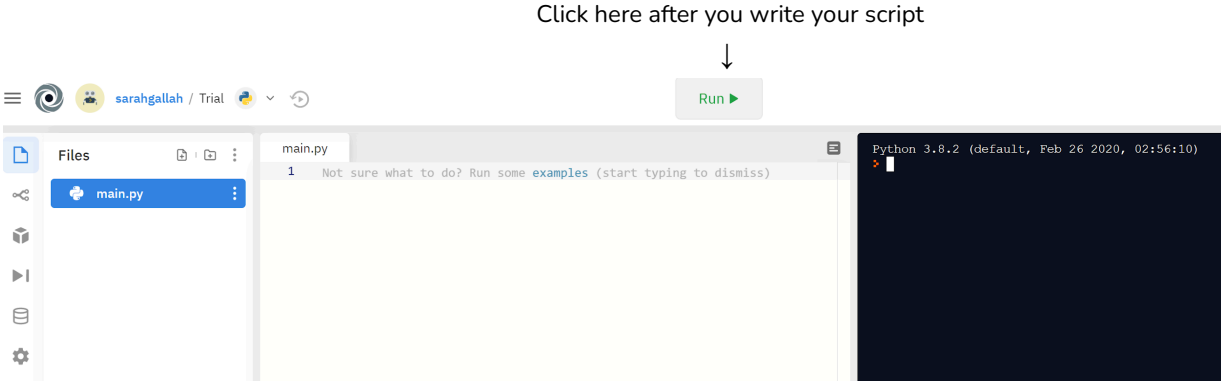


To read more about another application of coding, read [this National Geographic article](#) to learn how Hadi Partovi founded code.org and why he believes coding is important.

Part 1: Access an online compiler

1. Go to repl.it and create an account (if you'd like to save your work).
2. Scroll to the bottom of the page and select the language python.

Click here after you write your script



↑

This is where the files are located. Files written in python have the extension “.py”

↑

This section is where you write your script (input). Different commands go on different lines. (line 1, 2, 3, etc.)

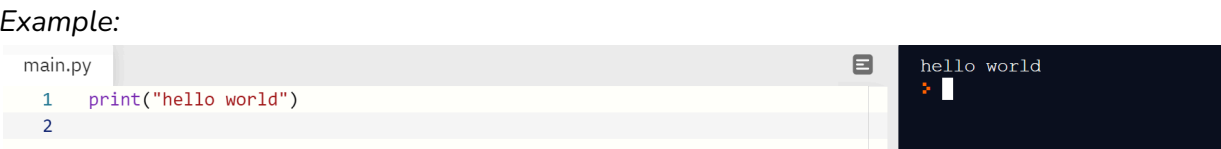
↑

This is where the output will be generated.

Part 2: Program your first code!

3. Type in the script `print(“hello world”)`
4. Click on [run](#).

Example:



Since the words are placed in quotations, a space can be used to separate the words. Otherwise, in python words are usually separated using an underscore _. For example, if “hello world” was not placed in quotations, it would be written as hello_world. Lowercase is also typically used in python as python is case sensitive, so lowercase is conventionally used to avoid confusion.