**Scene with Functions**

**Coding with CoPilot:**

For this assignment, we're giving you access to "code autocomplete": a feature that has become a standard tool for software engineers in industry through tools like GitHub's AI CoPilot. As you're typing, you'll see "ghost text" like in the picture below. You can press the Tab key when you see this text to have the text automatically inserted into your program.

A screenshot of a math equation

AI-generated content may be incorrect.

How it works: if you stop typing for a few seconds, AI CoPilot will suggest what you should write next and show its idea as "ghost text". Always make sure to read through and verify code generated by AI, AI systems can write bugs too!

**Your Goal:**

Build the nature scene shown in the image below. This assignment will not be graded (you can click "Mark Complete" to mark it as done), so don't worry too much about recreating it exactly. The goal is for you to get experience writing functions which take [parameters](/cip5/textbook/parameters).

A group of trees with different colors

AI-generated content may be incorrect.

Do your best to copy the example, then get creative and add try and add new objects to your scene! We've provided you some helpful starter code, including the code to draw a single cloud along with an example of using it as well as several constants like TRUNK\_HEIGHT and LEAVES\_SIZE that are helpful to decide how big to make your shapes.

We expect you to:

* Call draw\_cloud two more times to match the picture. Don't worry about getting the x and y position exactly right.
* Write a function draw\_tree that draws a single tree. The bottom of the trunks should be at TREE\_BOTTOM\_Y. Don't worry about getting the x position exactly right, but make sure you can easily place several trees at different positions by making several calls to draw\_tree.
* Make the trunk of the trees a rectangle that's TRUNK\_WIDTH wide and TRUNK\_HEIGHT tall. Use a circle to represent the leaves of the trees that is LEAVES\_SIZE wide.
* Feel free to color your clouds and trees however you like, just make sure you can easily color them all differently.

**Above and Beyond!**

You can make shapes beyond clouds and trees! Make a scene with any shapes you love and share it with the class on the forum.