In this activity, we will use Python as a simple calculator. This may feel like overkill, but it has significant advantages, both in terms of catching errors and in terms of communicating your work.

Let's consider Rain power from The Physics of Contemporary Challenges. In this activity, we estimate the power we could get by capturing the rainfall on a roof and usinging it to generate hydroelectric power. The basic idea is to estimate the height of the roof and the average mass of rain per day. From those you can find the gravitational potential energy available per day, and then convert that into Joules/second.

1. Your task will be to write a Python program to do this computation.

The advantages of writing a program to do this are

- You can go back and check that you didn't enter a number incorrectly.
- You can give descriptive names to values, so you (and your grader or coworker) won't have to guess at what you were doing.
- You can easily modify the computation.