Scratch

Head to scratch.mit.edu and sign up for an account on MIT's website by clicking "Join Scratch" atop the page. Any username (that's available) is fine, but take care to remember it and your choice of password.

Then head to https://scratch.mit.edu/ideas and take note of the resources available to you before you dive into Scratch itself. In particular, you might want to try out the Getting Started tutorial for Scratch at https://scratch.mit.edu/projects/editor/?tutorial=getStarted.

Now it's time to choose your own adventure! Your mission is, quite simply, to have fun with Scratch and implement a project of your choice (be it an animation, a game, interactive art, or anything else), subject only to the following requirements:

* Your project must have at least two sprites, at least one of which must resemble something other than a cat.
* Your project must have at least three scripts total (i.e., not necessarily three per sprite).
* Your project must use at least one condition, one loop, and one variable.
* Your project must use at least one sound.
* Your project must use standard Scratch blocks only to satisfy the above requirements (no add-ons).
* Your project should be more complex than most of those demonstrated in lecture (many of which, though instructive, were quite short) but it can be less complex than Oscartime. As such, your project should probably use a few dozen puzzle pieces overall.

Once finished with your project, click See project page in Scratch's top-right corner. Ensure your project has a title (in Scratch's top-left corner), some instructions (in Scratch's top-right corner), and some notes and/or credits (in Scratch's bottom-right corner). Then click Share in Scratch's top-right corner so that others can see your project. Finally, take note of the URL in your browser's address bar. That's your project's URL on MIT's website.

What's your project's URL on MIT's website?

https://scratch.mit.edu/projects/552401708

Write a program in pseudocode (i.e., step-by-step instructions in English) with which a human (or, if you prefer, a robot) could make a peanut butter and jelly sandwich (correctly).

You may assume that the human (or robot) has access to a loaf of bread, a jar of peanut butter, a jar of jelly, a plate, and a knife, but may assume nothing beyond that.

1- Take the brad
2- Take the peanut butter
3- Take the jelly
4- Get a knife
5 - Pass the peanut butter on a slice of the bread
6- Pass the jelly on the on the other slice of the bread
7- Join the both slice of the bread maintaining the peanut and the jelly inside

What is a Boolean expression? Provide an example (in English or pseudocode) of one.

Boolean expression is a logic expression to says true or false. Example, If you are hunger, makes a peanut better and jelly sandwich.

What does it mean to compile a program?

Compile program means the moment when the program is converted from the human-readable to machine code.

What's the difference between a program and a function?

Program is instructions executed by a machine and functions as a block of instructions used inside of a program.

What does it mean for a program to be multithreaded?

It means that a program can do more than one instruction at the same time instead of one sequential.