Intro/Motivation to Algorithms (2018.02.07-08)

Milly and Molly are best friends. They know each other since babies, but they have different personalities. Milly is very organized and tries to keep everything clean. Molly doesn't care about where she leaves her things on the house, but she is incredible at math.

Milly has been trying to get Molly to clean her room, so she tells her "Molly you need to clear all the clothes from the living room. Mom is coming this afternoon, and I don't want to feel embarrased. What will she think of me?"

Molly doesn't really care about how the house looks. She knows that mom knows how unorganized she is. But she loves her sister, so she asks her sister to tell her precisely what she wants from her.

Milly tells Molly:

> Take all your clothes and put them into a basket. Then, carry them to the laundry room. If all clothes are dirty then put them to wash, otherwise just leave them in there. I'll revise them one by one to put them to wash.

Molly went for a basket. When she was picking up the clothes she remembered what she just learnt in class and then tried to apply it.

Pseudocode

Molly first noticed that Milly was giving her an algorithm to run! The algorithm was simple enough for her to execute it without writing it down, but she wanted to take a look at it from a more formal perspective. So she went to her room, and started writing the instructions Milly gave her in a piece of paper.

This was her result in pseudocode:

Flowchart

Once she had written the pseudocode, Molly started to draw a flowchart of the pseudocode. Her result was a masterpiece:

Molly was so entertained scrabbling in the little piece of paper that she forgot to actually do what she was told to. Molly recalled it and went back to the living room, where she saw that everything was clean! Mom was already there. Milly had done all the hard work herself.