Marty continued to explore the village and the surrounding area, walking farther and farther with each trip. The code that was needed to get them there was getting amazingly long! Marty needed a way to write the instructions more quickly so he went to see ask the children in the village and Archie. Archie was working, when Marty came into the workshop, but was able to listen to what was asked.

“Archie,” asked Marty, “how can I make it easier to write longer instructions more quickly? It is taking me such a long time to walk ten steps and my code is starting to look a bit messy. It is especially messy when I want to do other things as well.”

“Well,” said Archie, “it looks like you want to change the *arguments* for your code.”

“I don’t know what an argument is,” replied Marty.

“I’m sorry Marty, I’m too busy to get into it now but maybe the children will know what an argument is. Go ask them,” suggested Archie.

So, Marty went off to find the children to find out about arguments and no sooner did he set off than he heard two children speaking to each other with very loud voices.

“I didn’t eat your sandwich,” said the first child.

“Well, there’s no one else here, so it must have been you,” said the second child.

“I just got here and I already ate this morning,” replied the first child, “so it couldn’t have been me .”

“Couldn’t have been you,” scoffed the second child. “You are here, the sandwich is not, case closed.”

*The presentation has an example argument between a young child and a mom and dad, on the next slide. Feel free to share this for a funny example or remove it if it is unnecessary.*

Marty approached the two children to find out more.

The first child saw Marty and said, “Hi Marty, we’re having an argument.” When Marty heard the word argument, their eyes lit up. “She says I took her sandwich but I didn’t.”

“Well, he says he didn’t eat the sandwich but there is no one else here so he must have.”

“Hmm,” thought Marty. “I wonder how this argument can help me with my code.”

Just then, a dog walked by with some ham stuck to its nose. “Hey!” Shouted the girl, “that dog must have eaten my sandwich. I am sorry for saying you did it and sorry for arguing.”

“That’s OK,” said the boy, “I would be upset if I thought someone took my sandwich, too!”

Marty was happy, they now knew what an argument was but didn’t understand how that could make their instructions any easier. Marty decided to go back to the workshop to see if Archie is free to help me.

When Marty arrived, Archie was outside enjoying the sunshine. “So,” said Archie, “what did you find out about arguments?”

“Well,” replied Marty, “I learned that an argument can happen when two people disagree, but I don’t think that helps me to make my instructions any easier.”

“Ahhh,” chuckled Archie. “It’s true that an argument can happen when two people disagree but an argument means something a bit different when you write instructions: an argument lets you know how many times to do the same step. So, If you used the forward arrow and change the argument to 2, you will take two steps instead of one.”

“Wow!” exclaimed Marty. “That will make my instructions **much** neater. Thank you, Archie.”

Marty went off right away to change his instructions to give himself less to read.

*The video shows two programs with different looking code. Turn on subtitles to see the best place to pause and discuss the first block of code. Pause after the change to the second block.*