

Diagramming if Statements

Suppose that you are getting ready to go to work. You get up, shower, dress, eat breakfast, and brush your teeth. Just before you walk out the door, you check the temperature outside. If it is cold outside, you put on a warm jacket. Then you go to work.

In this example, getting up, showering, dressing, eating your breakfast, and brushing your teeth are activities that all happen in a given order. All of the programs that you have written so far work this same way. Each line in the program is executed in order, one line after the other. But, after you checked the temperature, you did something very different. **If** it was cold outside, you put on your coat.

This kind of **decision** logic is common in most computer programs. The program makes a decision to do something different, based on some condition. We can draw a picture of this logic using an activity diagram similar to the one shown below. When you are asked to draw an activity diagram that shows decision logic, your diagram should follow this model.

