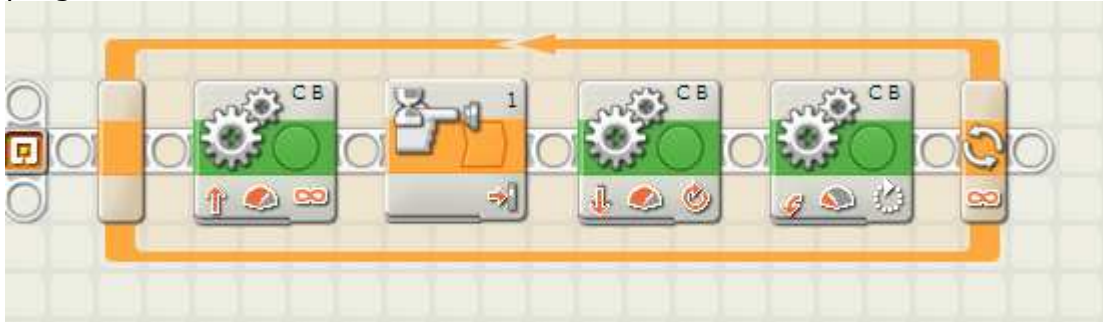


Sensory Programming – touch sensor:

program:



This program was pretty darn easy. Since I used the light sensor on the other one and then redid it with the actual distances it's a better comparison. Actually that one was much easier with the actual distances and the reliability of the two was similar – each ran sometimes and turned differently sometimes so wouldn't navigate the maze entirely well. I'd say they were similar and it really depends on what you are asking it to do.

The sensors provide a way for the robot to detect the environment and then react. It depends on what you want it to do. Sometimes you may be programming something very predictable and repetitive – like a robot used in a manufacturing production environment. Sometimes you may be programming something where you need the robot to react to variables or navigate a variable environment and then the ability to sense and react would be important.

My kids were wondering if the NXT could measure and record distance. I didn't know the answer but I haven't seen anything that provides that. I can see if you are telling it to go a certain number of rotations or a certain length of time that it should be able to go until something (like a sensor) and record how far it has gone. That would be fun and useful to play with – if it's not available yet, maybe on the next round. I can imagine programming the robot to navigate, detect, perform (like lift something up), move and perform again (like putting something down). Or it could perform until you make sound 1 and then react or move until you make sound 2 and then react – like move differently/turn differently depending on the sounds you make. Students could work in groups if you were working on social skill building. The organization, flowcharting, testing, recording, measuring, and cooperative skills would all meet curriculum objectives.