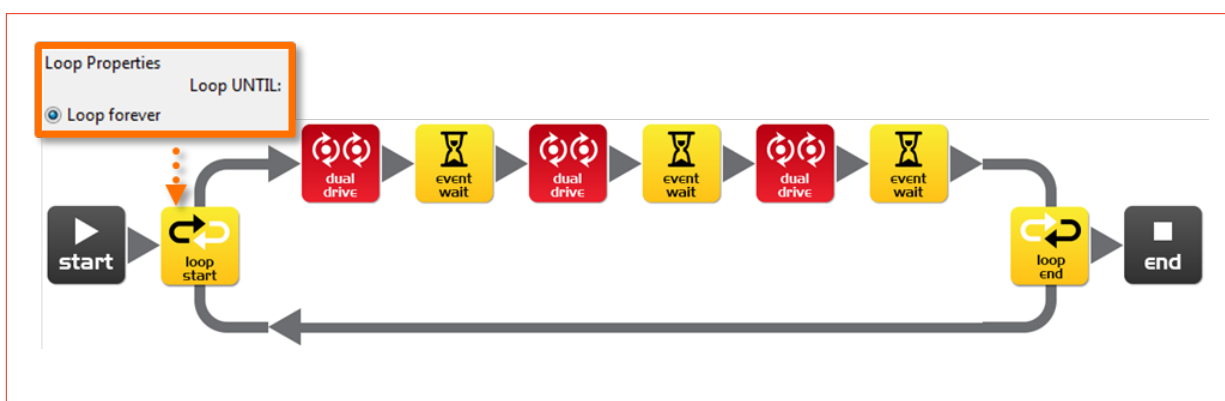


- 5** Write a short program with a 'cool' sequence of robot moves. Don't forget to use light and sound in your program as well as any other programming icon that adds to the dance routine.

## LOOPS?

In computer programming, a loop is a sequence of instructions that is continually repeated either forever or until a certain condition is reached, for example "As long as you are tired, stay asleep". It is a way to execute a piece of code multiple times. Typically a certain process is done, such as reading the temperature, and then some condition is checked to see if the temperature is above a threshold. If it isn't hotter than the threshold then keep looping the read and check until it is hotter!

Use loops in your program so that the movements repeat. An example is shown below:.



## Advanced Challenge

- 6** When you have written your sequence of moves and tested it, have one of the mentors and your fellow ninja's review it and agree which robot performs the best routine.

Share the program from the best routine with the rest of the class. We're going to perform a mexican wave where each robot performs the same routine after a brief delay. Add an event wait to your program so that it is added just before the loop start. Your mentor will tell you how long to set the delay for.

Place the robots in a line in order of delay time with the shortest delay at the beginning of the line and the longest at the end. Everyone presses play on their robot at the same time.

Stand back and watch the performance.