

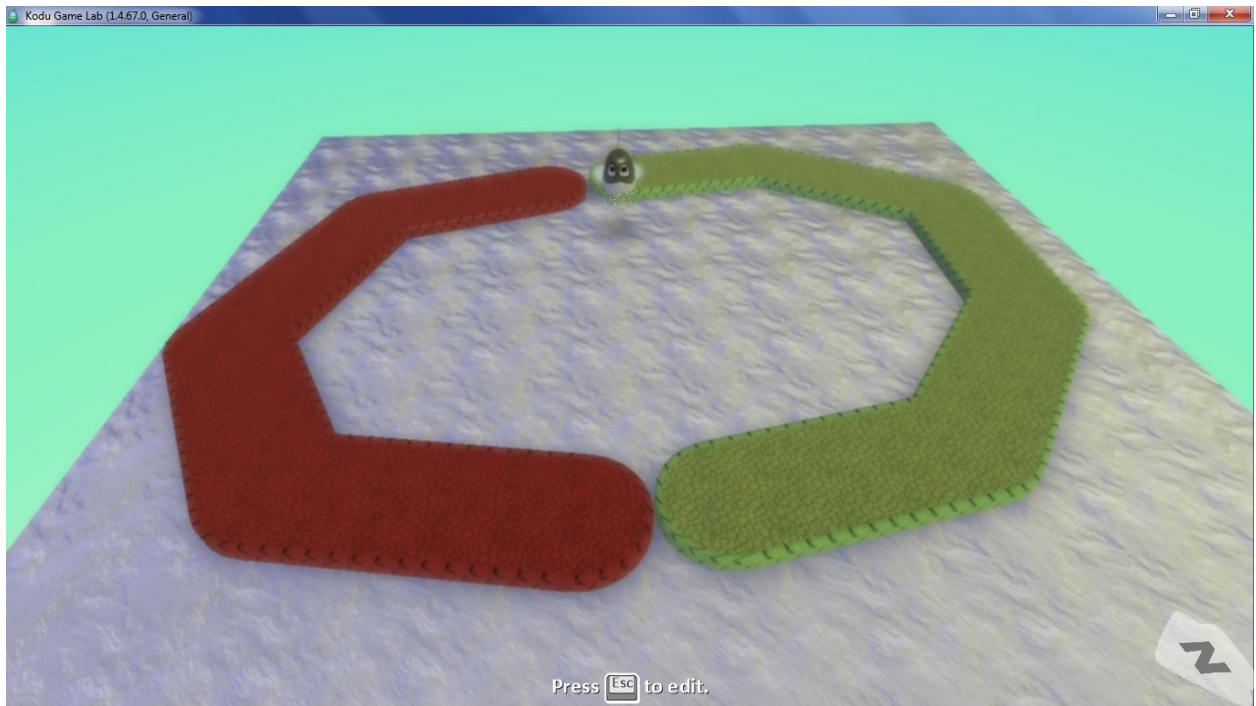
## Student Questionnaire: Session 6

Version of June 4, 2015

1. What is the idiom for moving along a path?

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2. Consider the world below, which has a red path and a yellow path that together form a circle:



The kodu wants to go around and around the circle. How many states will this require? \_\_\_\_\_

3. Draw a state machine diagram to describe your solution:

4. Write down the rules to make the kodu follow the circular trajectory:

5. Look at the paths in the ForkedPath1 world. View the world in the editor; don't run it. This will allow you to see the nodes and links that make up each path. A node looks like a sphere, and a link is a straight segment that connects two nodes.

- a. How many nodes are in the red path? \_\_\_\_\_
- b. How many links are in the red path? \_\_\_\_\_
- c. How many nodes are in the white path? \_\_\_\_\_
- d. How many links are in the white path? \_\_\_\_\_
- e. In general, if a path has  $N$  nodes and no loops, how many links does it have? \_\_\_\_\_
- f. How many nodes are in the orange path? \_\_\_\_\_
- g. How many links are in the orange path? \_\_\_\_\_
- h. Does this agree with your formula in part (e)? Why or why not?

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