Module 5: State1 World

Version of 14 June 2015

In the previous problem using the State1 world the kodu started out next to the blue tree. Using the object tool, place the kodu next to the orange tree. To do this, put the cursor over the kodu, press the “A” button to pick it up, move the cursor next to the orange tree, and press “A” again to put the kodu down. The result should look like the picture above.

1. What happens when you run the program? Does the kodu make it to the castle?
2. It’s not safe for the kodu to travel directly to the red tree from its new starting position. But if it can get to the blue tree, then it will be safe to move to the red tree and from there to the castle.
3. Draw a state machine diagram in the space on the next page, with three states, to show what the kodu needs to do to reach the castle from its new starting point next to the orange tree.
4. Change the kodu’s programming to match the state machine you drew, and also make the kodu use the Show Page As Color idiom to tell us its state on each page.
5. Run the program to see the kodu reach the castle successfully from the orange tree.
6. What color is the kodu when it reaches the castle? (It should be green.)
7. Write down the rules for the kodu in the box at the bottom of the next page.
Draw your state machine diagram here:

Write down the Kodu rules for your state machine here, starting with “PAGE 1”: