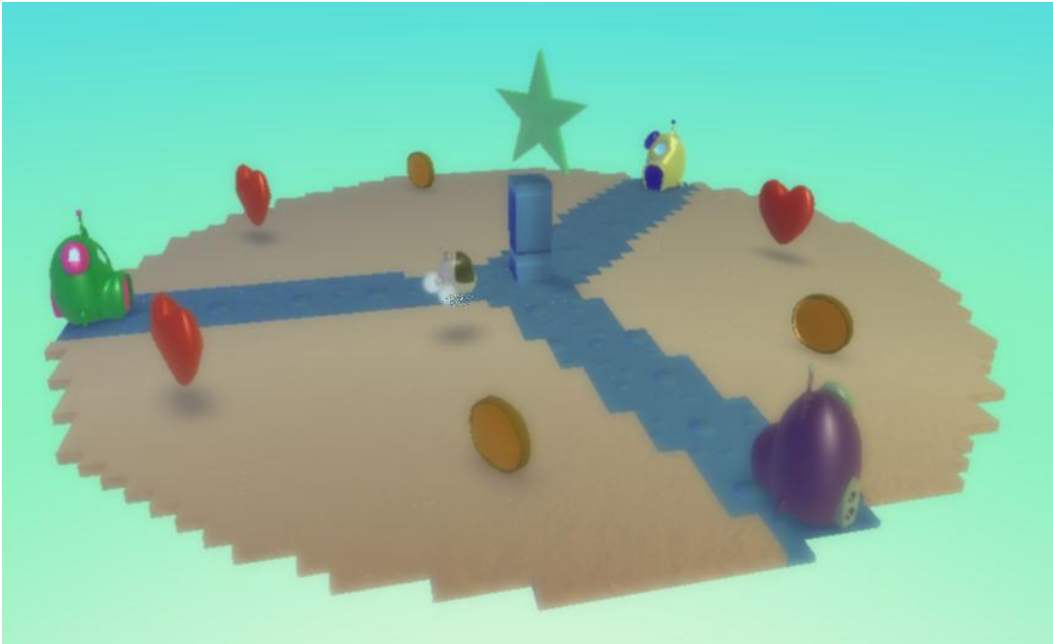


Module 1: Star2 World

Version of November 19, 2015



1. To load the “Star2” world:
 - a. Press the Start button..
 - b. Select “Load World”.
 - c. If asked, press the blue “X” button to discard any changes to your previous world.
 - d. Choose the “Downloads” tab and select Star2.
2. Program the Kodu to **eat all the hearts**, and then to **eat all the coins**. Use the Pursue and Consume idiom. You will need **four rules** to solve this problem.

Note: to enter “heart” or “coin” you must select “objects” and then “more” and “more”.

What does the kodu do when you run your program?

What is the first thing the kodu eats?	(a) Heart	(b) Coin
What is the second thing the kodu eats?	(a) Heart	(b) Coin
What is the third thing the kodu eats?	(a) Heart	(b) Coin
What is the fourth thing the kodu eats?	(a) Heart	(b) Coin
What is the fifth thing the kodu eats?	(a) Heart	(b) Coin
What is the sixth thing the kodu eats?	(a) Heart	(b) Coin

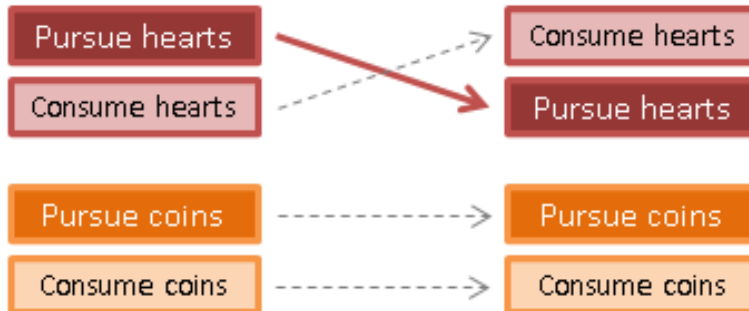
What pattern do you see in the order of hearts and coins the kodu eats?

Why do you think the kodu eats in this order?

Challenge: can you change the program to switch the order in which the kodu eats the hearts and coins?
How would you do that?

Rule Scramble 1

Try switching the order of the pursue and consume rules for hearts. Remember that a pursue rule uses “move” and a consume rule uses “eat”:



To move the first pursue rule to after the consume rule, do this:

- Edit the kodu’s rules, and using the left stick, place the pencil on the “1”.
- Press the green “A” button to pick up the first pursue rule.
- Move the left stick down, so that this rule becomes rule number 2.
- Press the “A” button again to put down the rule.
- Press the red “B” button to leave the rule editor.

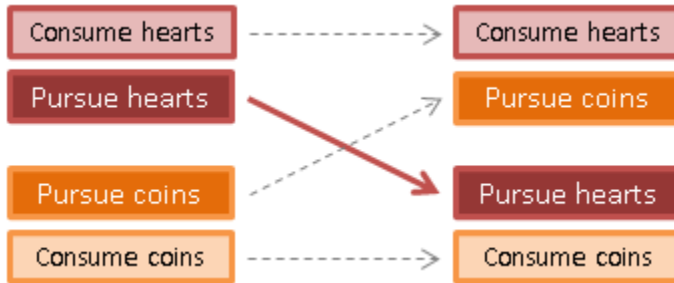
Run the program. In what order does the kodu eat the objects?

First thing eaten	(a) Heart	(b) Coin
Second thing eaten	(b) Heart	(b) Coin
Third thing eaten	(c) Heart	(b) Coin
Fourth thing eaten	(d) Heart	(b) Coin
Fifth thing eaten	(e) Heart	(b) Coin
Sixth thing eaten	(f) Heart	(b) Coin

Why do you think the kodu pursues all of one type of object before pursuing the other type?

Rule Scramble 2

Now try switching the heart pursue rule with the coin pursue rule:



To move the pursue hearts rule to after the pursue coins rule, do this:

- Edit the kodu's rules, and using the left stick, place the pencil on the "2".
- Press the green "A" button to pick up the pursue hearts rule.
- Move the left stick down, so that this rule becomes rule number 3.
The pursue coins rule should have become rule number 2.
- Press the "A" button again to put down the rule.
- Make sure your rules match the right side of the diagram above.
- Press the red "B" button to leave the rule editor.

Run the program. In what order does the kodu eat the objects?

First thing eaten	(a) Heart	(b) Coin
Second thing eaten	(b) Heart	(b) Coin
Third thing eaten	(c) Heart	(b) Coin
Fourth thing eaten	(d) Heart	(b) Coin
Fifth thing eaten	(e) Heart	(b) Coin
Sixth thing eaten	(f) Heart	(b) Coin

Now why do you think the kodu pursues all of one type of object before pursuing the other type?