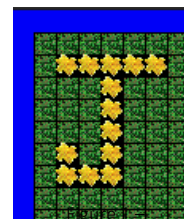


(30 pts) Approx. 2 days

The first part of our unit gives us a beginning introduction to the world of *Jeroo*. The Jeroo simulation is a small self-contained programming simulation that lets you write real Java programs in the left part of the screen, and see the resulting output as little arrow-shaped “Jeroos” hop around on an island planting flowers. It’s a lot more fun than it sounds, and it ends up being an absolutely *perfect* introduction to the world of programming!

1. Start by watching the three introductory videos on our website: *Jeroo Introduction 1 & 2*, and *Jeroo Methods*. These videos give a good overview of all the parts and pieces available in Jeroo. Take a full page of notes on the ideas presented in these videos.
2. ***DOWNLOAD*** the Jeroo files from our website. The folder needs to be extracted to the desktop and contains the Jeroo simulation as well as all the special maps you’ll need to work with this unit!

3. **Challenge 1: FIRST INITIAL** Develop a program that creates a new Jeroo named after you! The Jeroo should start at location (2,3), and should start holding 50 flowers. The Jeroo should then hop around on the island planting flowers that create your first initial. In the example to the right, Jeroo “Jeremy” has hopped around and planted flowers in a “J”:



The Island After Jeremy Plants The Letter “J”

Challenge 2: TWO INITIALS Develop a program that has two methods in the “Jeroo Methods” tab. One method should tell your Jeroo how to hop and plant your first initial (like in Challenge 1), and the second method should tell your Jeroo how to hop and plant your second initial. Then use the “main method” to create a Jeroo and have it hop out both of your initials. In the example below, a Jeroo has hopped out it’s initials “ME”:

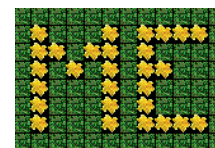


Figure 2 – The Island After the Jeroo Plants The Letters “ME”

Challenge 3: NET DISABLE Develop a program that uses the included island file (in the map folder) to create a new Jeroo at the location (0,0). The Jeroo should pick the flower then use it to disable the net so it can get home. (Home is the square of nets).

Challenge 4: RELAY RACE Develop a program that makes 4 Jeroos at these locations and directions: (1,1,EAST), (1,23,SOUTH), (23,23,WEST), (23,1,NORTH) and places them on the included island. The Jeroos are running a relay; the first Jeroo pick up the flower. It should then run clockwise and disable the net so it can meet the Jeroo in the top-right corner. That Jeroo should then pick the nearby flower, and use it to get to the bottom-right corner. That Jeroo then uses the flower to reach the bottom-left corner. That Jeroo then picks the flower and runs up to end at spot (0,0).

Part 1: Tasks	4 points	3-2 points	1-0 points
Jeroo Notes	+ Watch all <i>Jeroo Introduction</i> presentations + You took a full page of notes on Jeroo and basic programming	- Less than a full page of Jeroo notes	- Very brief or no notes in your notebook
Beginning Challenge 1	+ You completed the first Beginning Challenge: <i>first initial</i>	- You never got the program working fully	- You did not attempt the challenge
Beginning Challenge 2	+ You completed the second Beginning Challenge: <i>two initials</i>	- You never got the program working fully	- You did not attempt the challenge
Beginning Challenge 3	+ You completed the third Beginning Challenge: <i>Net Disable</i>	- You never got the program working fully	- You did not attempt the challenge
Beginning Challenge 4	+ You completed the fourth Beginning Challenge: <i>Relay Race</i>	- You never got the program working fully	- You did not attempt the challenge
Jeroo Assignment	+ You completed the Jeroo Assignment	- You only completed part of the assignment	- You did not complete the assignment

