Array Practice
Nov 7, 2013

\[ \text{heights} = \{1.06, 1.57, 7, 0.4, 1, 1.04\} \]

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Announcements

• Next time Review for Test
  – Work old test problems on paper
• Test 2 is Thursday, November 14
• After Test – more Alice 2/Alice 3
• Today – more practice with arrays, visual and nonvisual
NonVisual Array

• Problem: Create an array of animals and then generate an array of the heights of the animals.
Create an array of Animals

- Under world properties, create new Variable, check the “make a array”
Create an empty array of heights

animals = whiteRabbit, tortoise, trex, turtle, penguin, monkey

heights = []
Calculate the heights of the animals and store in the heights array

• Must drop the name of the array over items to use the array!

Result:

• Exercise: Using the height array, how do we compute and print out the maximum height?

The maximum height is 7.0
Classwork
Part 1 – Nonvisual array

• Create a nonempty array of integers
• Fill it with random integers
• Compute which number appears the most often
Classwork

Part 2: Visual Arrays – Array of frogs

• Double size of all frogs

• Randomly color some frogs

• Move frogs of new color all to left in array by swapping
Solution to Exercise

world.my first method  No parameters

maxHeight = 0

Loop index from 0 up to (but not including) size of world.animals incrementing by 1

set item index to subject = item index from world.animals's height in world.heights

maxHeight set value to 0 more...

Loop index from 0 up to (but not including) size of world.heights incrementing by 1

If item index from world.heights > maxHeight

maxHeight set value to item index from world.heights more...

Else Do Nothing

print The maximum height is joined with maxHeight as a string