

Row of Dollhouses

In “Row of Houses”, you drew many houses of the exact same shape and size. What if you want small houses for ants? Giant houses for giants? Many beings of many different sizes?

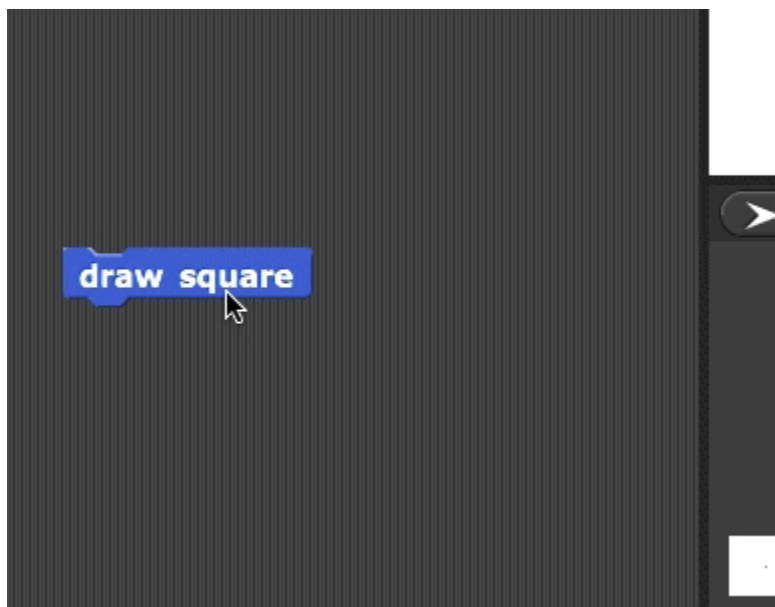
You can improve your blocks to draw squares, triangles, and houses of any size by giving your block an *input*. You’ve seen many other blocks that take input:



Now you’ll make your own.

1. Open your “Row of Houses” project. If you don’t have it, use the teachers’ solution: https://snap.berkeley.edu/snap/snap.html#present:Username=dphhscodingclub&ProjectName=rowofhouses_Solution_sp2022&editMode&noRun
2. Edit your draw square block to give it an input.
 - Right-click on it and select "edit..."
 - To add an input, click the last "+" in the top block, type an input name (“size”), and click "OK."
 - To use the inputted data, drag the input name (“size”) out of the top block and place it in your script.

Below is a video showing what to do.

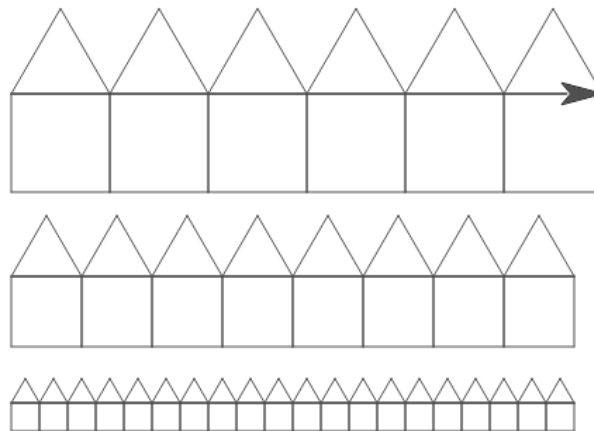


- Check your work. When you click “OK” (or “Apply”) in the block editor, you'll see that the **draw square** block now takes an input. Run this script with a few different inputs to check that it works.



- Edit your **draw triangle**, **draw house**, and **draw row of houses** blocks so that you can draw triangles, houses, and rows of houses of any size you specify as input.

When you're done, you'll be able to draw a tract of inclusive multi-species housing.



- (optional) Create a **draw hexagon** block with an input that lets you control its size.
- (optional) Create a **honeycomb** block (with an input to let you control the size) that uses your hexagon block three times to create:



- (optional) Create a **draw polygon** block that takes two inputs:
 - a number of sides (call the variable sides)
 - the length of each side (call the variable size or side length)



Test your solution with several polygons with different lengths and numbers of sides.