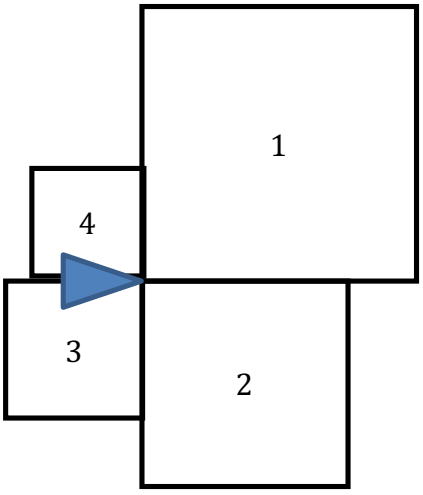
Name _____

CPADS Lab #5

1. Develop a **strategy** with pseudocode that creates a pinwheel by obtaining user input for variables **size1, size2**, **size3**, **size4** and computing movement to the centers of each square **USING** the following functions:

   - For squares 1 and 2 – using right angles to move to the center and back to the origin
   - For squares 3 and 4 – using diagonals to move directly from center to center, i.e. from the center of 2 to the center of 3, and from the center of 3 to the center of 4

   Hint: ***Your strategy should have three parts – one for each of the two functions and one for the main program, which will be calling those functions. Consider what information the functions will need in order to accomplish their specific tasks. Be sure to leave the cursor in the same location and orientation in which it began.***



Name _____

2. **Download the file pinwheelFunctions.py from the course webpage**

https://ycpcs.github.io/cs100-fall2017/labs/src/pinwheelFunctions.py

and open it with PyCharm. USING YOUR STRATEGY FROM PART 1, complete the program by adding code:

- To obtain user input for variables **size2**, **size3**, **size4**
- Complete the **moveToCenterRightAngle** function by adding necessary *parameters* and function code
- Complete the **moveToCenterDiagonal** function by adding necessary *parameters* and function code
- Complete **main** to *call* the new functions with appropriate *arguments* such that **main** contains **no** movement commands – **forward(), setposition(),** etc., but may use orientation commands – **right(), left().**