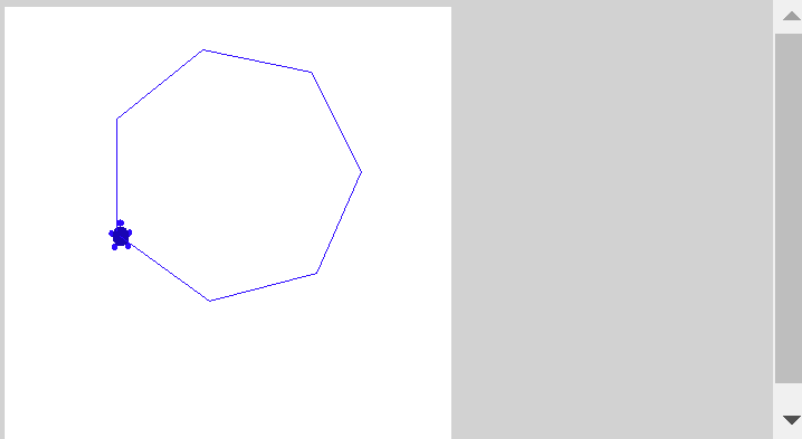


Use a for-loop to draw a triangle. Then, change it to a pentagon. Then change it to draw any polygon using a variable n that holds the number of sides. Note that the angles in the turns have to add up to 360. The autograder only checks one shape at a time, so comment out the code for one shape before starting on the next.

Save & Run 7/14/2024, 4:16:15 PM - 8 of 8 Download Show CodeLens Reformat Pair?

```
1 //Code by Akshat Gang
2 import java.awt.*;
3 import java.util.*;
4
5 public class TurtleDrawShapes
6 {
7     public static void main(String[] args)
8     {
9         World world = new World(400, 400);
10        Turtle yertle = new Turtle(world);
11        yertle.penUp(); // move a little to the left
12        yertle.moveTo(100, 200);
13        yertle.penDown();
14        yertle.setColor(Color.blue);
15
16        // Add your loop here!
17        int n = 7;
18        for (int i=0; i<n; i++) {
19            yertle.forward(100);
20            yertle.turn(360/n);
21        }
22
23        world.show(true);
24    }
25 }
26
27
```



Result	Expected	Actual	Notes
Pass	true	true	Checking that code contains for loop
Pass	1 forward(...)	1 forward(...)	Should only need forward() once
Pass	1 turn(...)	1 turn(...)	Should only need turn(...) once
Pass	true	true	Declare int n
Pass	true	true	Calculates angle correctly using n

You got 5 out of 5 correct. 100.00%

Activity: 4.2.4.1 ActiveCode (challenge4-2-TurtleLoopShapes)

Write a while loop that replaces every occurrence of "cat" in the message with "dog" using the indexOf and substring methods.

Save & Run

7/14/2024, 4:17:14 PM - 7 of 7

Download

Show CodeLens

Reformat

Pair?

```
1 //Code by Akshat Garg
2 public class ChallengeReplace
3 {
4     public static void main(String[] args)
5     {
6         String message =
7             "I love cats! I have a cat named Coco. My cat's very smart cat";
8         // Write a loop here that replaces every occurrence of "cat"
9         // in the message with "dog", using indexOf and substring.
10        while (message.indexOf("cat") != -1){
11            message = message.substring(0,message.indexOf("cat")) + "dog"
12                + message.substring(message.indexOf("cat")+3);
13        }
14        System.out.println(message);
15    }
16 }
17
18
```

I love dogs! I have a dog named Coco. My dog's very smart dog

Result	Expected	Actual	Notes
Pass	true	true	Checking that code contains while loop
Pass	I love dogs! I have a dog named Coco. My dog's very smart!	I love dogs! I have a dog named Coco. My dog's very smart dog	Running main
Pass	true	true	Checking that code contains substring
Pass	false	false	Checking that code contains shortcut replace

You got 4 out of 4 correct. 100.00%

Activity: 4.3.3.1 ActiveCode (challenge4-3-string-replace)

Interesting use of indices, had to manipulate strings a bit, but in the end turned out to be a simple algorithm.