

OzoBlockly Challenge: Six Squares

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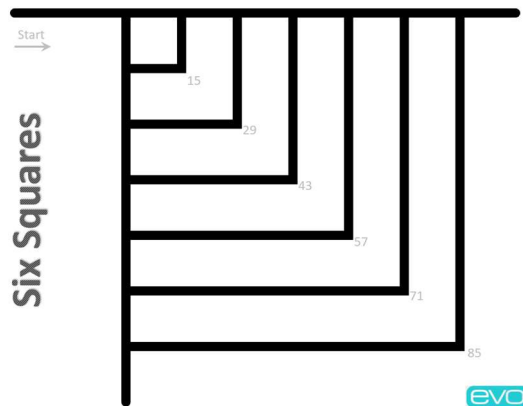
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Introduction

This is an OzoBlockly challenge that involves programming by pattern recognition. The challenge emphasizes loops including nesting of loops. In addition, students will make use of navigation blocks and the rotate movement block. Finally, students will get practice in varying line-following speed.

A small copy of the map used for this challenge is shown in the figure below and can be used as a reference while reading the challenge. A larger copy, suitable for printing and using with Evo, can be obtained by printing the file *Ozomap for the Six Squares Challenge.pdf*.



Challenge Requirements

1. Evo should be started on the black line labeled start and facing the direction shown by the arrow.
2. Evo should move to and go around the small square with a speed of 15 mm/s. The speed is shown in light gray on the Ozomap. Evo should then return to the start location and turn around so he once again faces the direction of the arrow.
3. This process should be repeated for the remaining five squares from the smallest to the largest, with speeds as indicated on each of the squares.
4. Your OzoBlockly program should make heavy use of loops and not exceed 50 blocks in length.