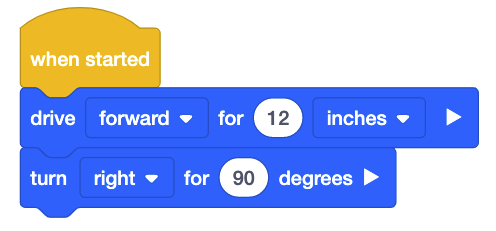
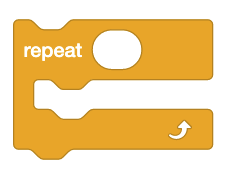
 Activity

|  |  |
| --- | --- |
|  | Square Dance Code the BaseBot to drive in a square! |

# Step by Step

1. [Build the BaseBot](http://link.vex.com/iq/builds/basebot/iq-2nd-gen-basebot) and open the BaseBot (Drivetrain 2-motor) template in VEXcode IQ. 
2. Drag in a [Drive for] block and change the parameter to “12” and the dropdown to inches.
3. Drag in a [Turn for] block, placing it under the [Drive for] block. These two blocks will make the first corner of the square.
4. Add additional blocks to code your robot to drive in a square.
5. Download the project to the Brain and run it.
6. In order to make a complete square with fewer blocks, you can repeat the actions of making one corner. Drag in a [Repeat] block, and wrap it around the first [Drive for] and [Turn for] blocks. How many times should the blocks be repeated to make a complete square?

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| --- | --- |
| ‘LEVEL UP’  * **Upsize -**  Change the parameters to make a bigger square. * **Rectangle Challenge -** Now that you can make a square, how can you use the repeat block to make a rectangle? | Pro Tips  * In order to better understand looping and repetitions, write out each action the BaseBot will take to drive in a complete square. Note where steps repeat. |

**Standard:** CSTA (2-AP-13) Algorithms and Programming - Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.