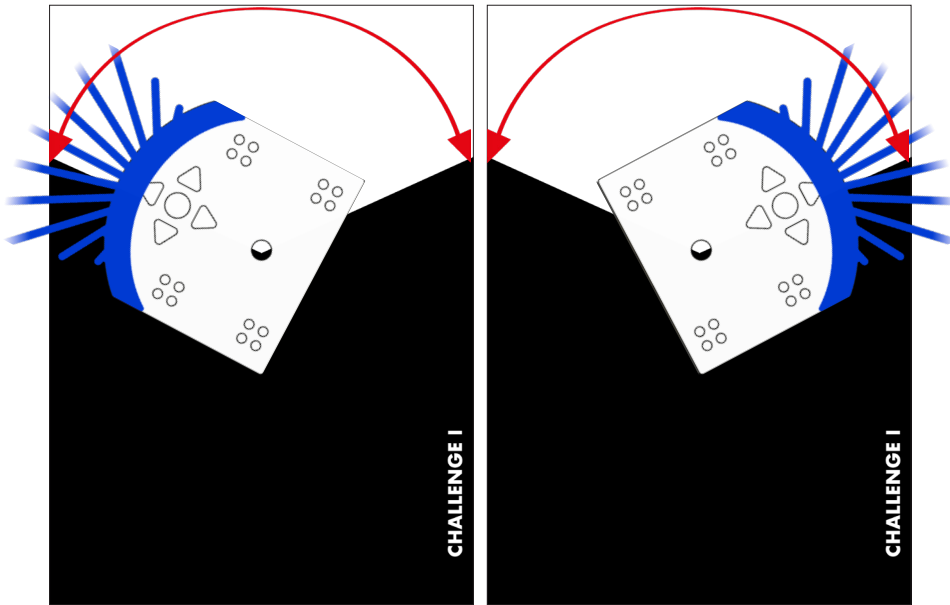


CHALLENGE I



Starting position

The hole in the Thymio is aligned with the bottom of the white triangle. The robot's centre line is aligned with the black line on the left.

Goal

The Thymio should rotate on itself and oscillate between the two black lines.

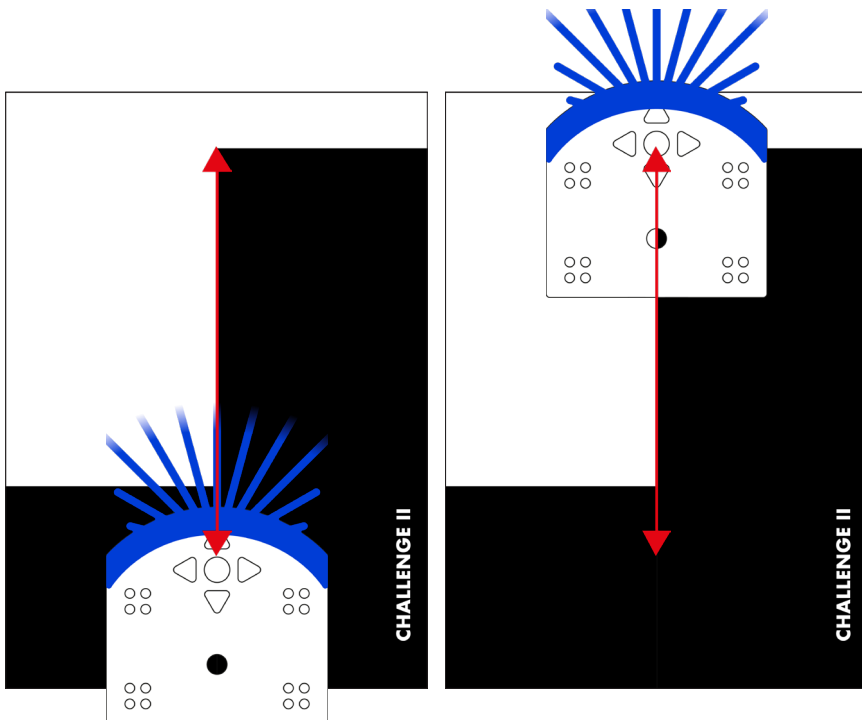
How

Use the bottom sensors and the two wheels.

Need a hint?

Have a look at the back of the page!

CHALLENGE II



Starting position

The Thymio is placed on the black area, with the center of the robot aligned with the centre of the page.

Goal

The Thymio should move back and forth across the page: from the black area at the bottom of the page to the white area at the top.

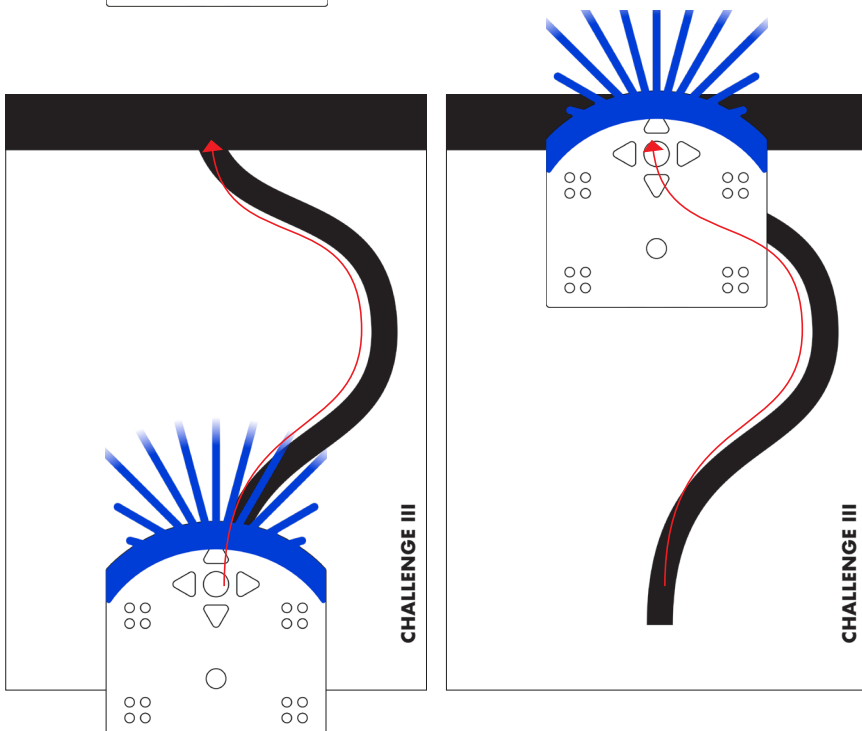
How

Use the bottom sensors and the two wheels.

Need a hint?

Have a look at the back of the page!

CHALLENGE III



Starting position

The caster wheel of the Thymio is placed on the starting point of the black line, at the bottom of the page.

Goal

The Thymio should follow the line until it reaches the black area at the top of the page.

How

Use the bottom sensors and the two wheels.

Need a hint?

Have a look at the back of the page!

CHALLENGE I / hint

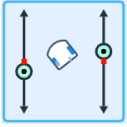
Place in VPL3 the conditions and actions correctly with the following parameters:



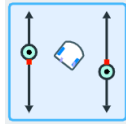
«If the left sensor detects white, and the right sensor detects black ...»



«If the left sensor detects black, and the right sensor detects white ...»



«... then the robot rotates slowly to the left»



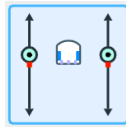
«... then the robot rotates slowly to the right»

CHALLENGE II / hint

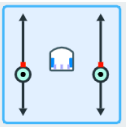
Place in VPL3 the conditions and actions correctly with the following parameters:



«If the two bottom sensors detect black ...»



«... then the robot slowly moves forward»



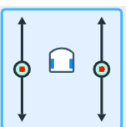
«... then the robot slowly moves backwards»



«If the two bottom sensors detect white ...»

CHALLENGE III / hint

Place in VPL3 the conditions and actions correctly with the following parameters:



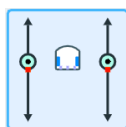
«... then the robot doesn't move»



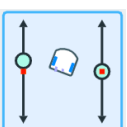
«If the two bottom sensors detect white ...»



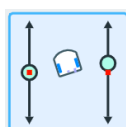
«If the two bottom sensors detect black ...»



«... then the robot slowly moves forward»



«... then the robot turns slowly to the right»



«... then the robot turns slowly to the left»



«If the left sensor detects black, and the right sensor detects white ...»



«If the left sensor detects white, and the right sensor detects black ...»