

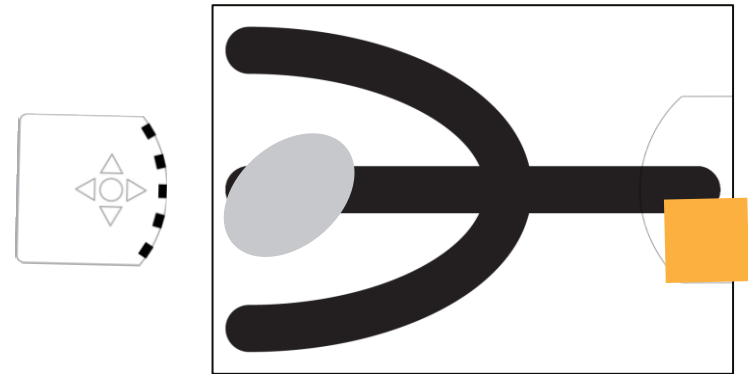
# How to cut a complex task into simpler ones



# Challenge

Here is a situation. The robot is behind a very heavy rock and it has to arrive towards the orange obstacle.

How would you program it?



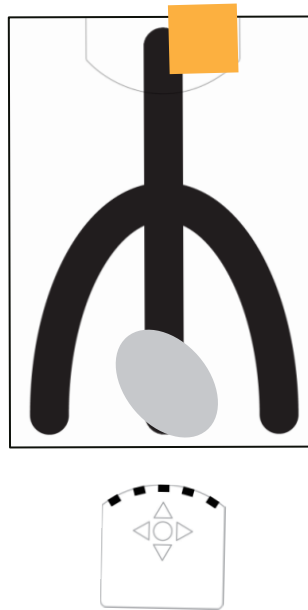
You can find the challenge sheet, an explanation and a possible solution for the challenge on the next page



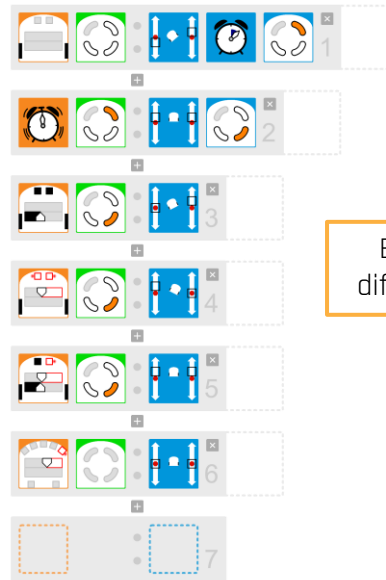
# Explanation and a possible solution the challenge

This challenge is to show an example of a strategy that could be used during the mission. Because of the delay between the video stream coming from Mars and real time here on Earth, it will be very difficult to correct an error. That's why it is better to cut a complex task into small steps. This allows us to create a lot of simple programs and do course correction more often in case of errors.

1. Turn to the left towards the black line.
2. Move forward till the black line.
3. Follow the black line by its left side and stop in front of the obstacle.



Difficult strategy would be to create a complex program



Example of a difficult program

A more reasonable strategy is to make a few simple programs.

