

# Turn Over Rover

Program the rover to detect if it is upside down or not. When the rover is the right way up set it's LEDs to green. When the rover is upside down set the LEDs to red. The rover should change the LEDs as soon as it detects a change in orientation, you should not need to press the play button to trigger a change in colour.

## Relevant Coding Skills

↻ Iteration    ⚙️ Branching

## Relevant Rover Concepts

✦ Accelerometer    💡 LEDs



## Here's Our Approach

### Stage 1

Start with an **IF Statement**. Make the condition our **sensor block** that checks if the robot is the right way up.

### Stage 2

If our condition is true (the robot is the right way up) we want to use a **Set All LEDs** block and make all the LEDs green. If our condition is not true (the robot is upside down), use the **ELSE** part of the **IF statement** to set all our LEDs to red.

### Stage 3

If we run our code with just an IF statement it will check our sensor once and end the program. We want our robot to constantly check if it is upside down or not and change the LEDs accordingly so we put our entire **IF statement** in a **repeat while true** loop.

