

The Puzzle

A school play has 2 spotlights for its stage: **RED** and **GREEN**.

The colour of the stage depends on which lights are turned on.

The table below shows the 4 possible combinations.

RED	GREEN	STAGE light
OFF (0)	OFF (0)	BLACK
OFF (0)	ON (1)	GREEN
ON (1)	OFF (0)	RED
ON (1)	ON (1)	YELLOW

The lights for the show will repeat the sequences below from the start:

RED Light sequence: 2 minutes ON, 2 minutes OFF, then repeat.

GREEN Light sequence : 1 minute OFF, 2 minutes ON, then repeat.

What will the stage colour be in the 6th minute of the show?