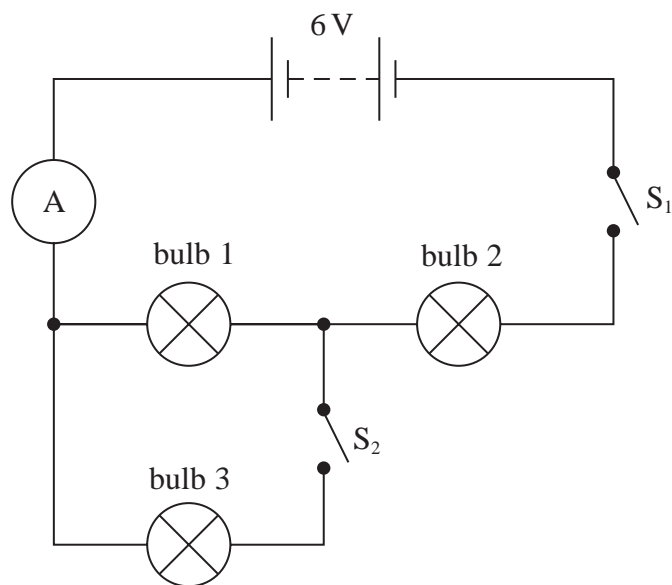


3 A student connects three identical 3 V bulbs to a 6 V battery of negligible internal resistance. The circuit includes two switches, S_1 and S_2 , as shown.



The student closes S_1 and records the brightness of each bulb.

With S_1 still closed, the student closes S_2 .

Explain how the brightness of bulb 1 compares with the brightness of bulb 2 before and after S_2 is closed.