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Etude 2 - Part 2

This circuit will allow less current to be in the LED's, if the five resistors are the same resistance as the one in the built circuit.

Why? Because since the resistors are current limiting device, with the same voltage going into each resistor means that 1/5 of the current will be in each branch. Therefore, for each LED, there will be less current, and therefore less power.

Depending on the capacity of the LED's, this could be a good or bad thing, because it will cause them to have more power, since the power depends directly on the voltage consumed by the LED, therefore to illuminate more, but it could also break them if they are not adapted to that much power.

Therefore, the Built Circuit is better, since we wouldn't even see the lights if there was only 1/5 of the amount of current.

One way to improve the Built Circuit could be to replace the resistor by a photocell resistor, which would allow the amount of current and therefore the power to change depending on the amount of light already in the room. When there is more light in the room, the lights would also be brighter, and when in a dark room, the lights would be less bright.