**Bathroom (Area of 6m** **²)**

This is the circuit for the bathroom. It has an AC power source, two LED lamps and two fancy switches, one for each lamp. One lamp in the mirror and another one on the ceiling. This room also contains 2 sockets.

 **Living room (Area of 12m** **²)**

The living room has four LED lamps and two fancy switches to control half of the lamps (lamp in the bottom branch) and another one to control the whole circuit. This circuit is powered by an AC power source and has two sockets.

 **Bedroom (Area of 10m ²)**



This is a circuit model for a bedroom. It is powered by an AC power source and has three Led lamps and two fancy switches to control half of the lamps (lamp in the bottom branch) and another one to control the whole circuit. This model contains four sockets.

 

The kitchen circuit is made up of three LED lamps and six sockets. It is powered by an AC power source and has two fancy switches, one to control half of the lamps (lamp in the bottom branch) and another one to control the whole circuit.

In total these four chambers have 190m of wires, 12 LED lamps and 14 sockets it also contains 4 AC power sources in addition to the 8 fancy switches.