

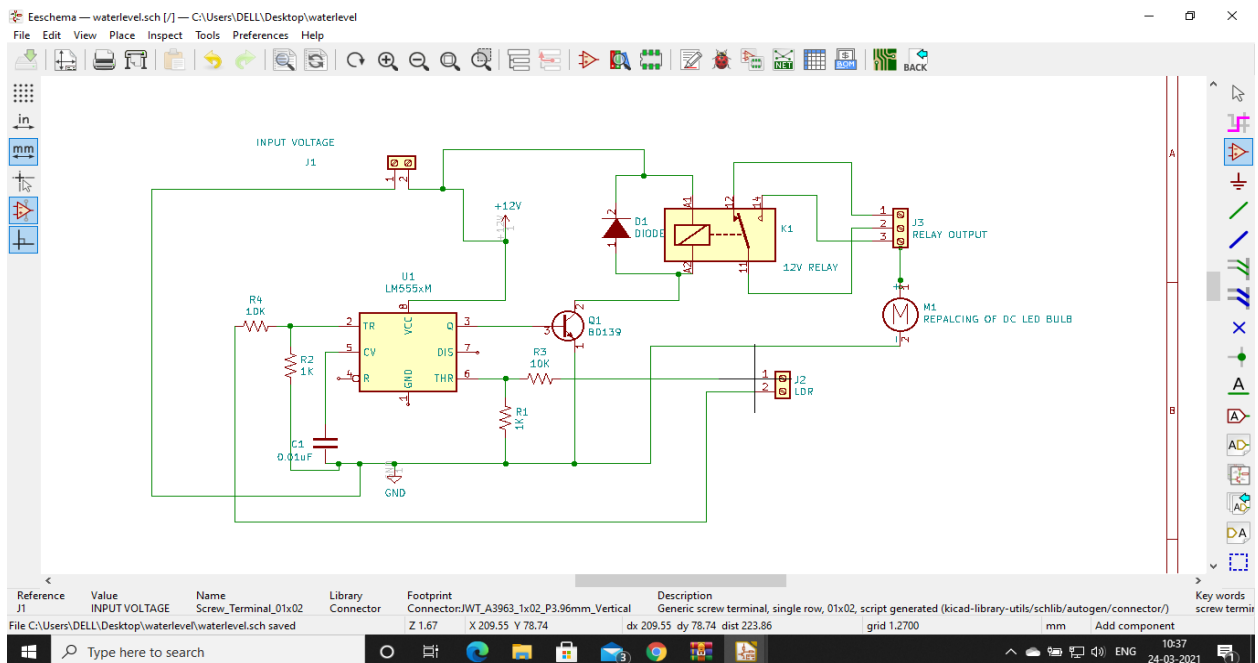
AUTOMATIC STREET LIGHT USING 555 AND LDR

CIRCUIT WORKING:

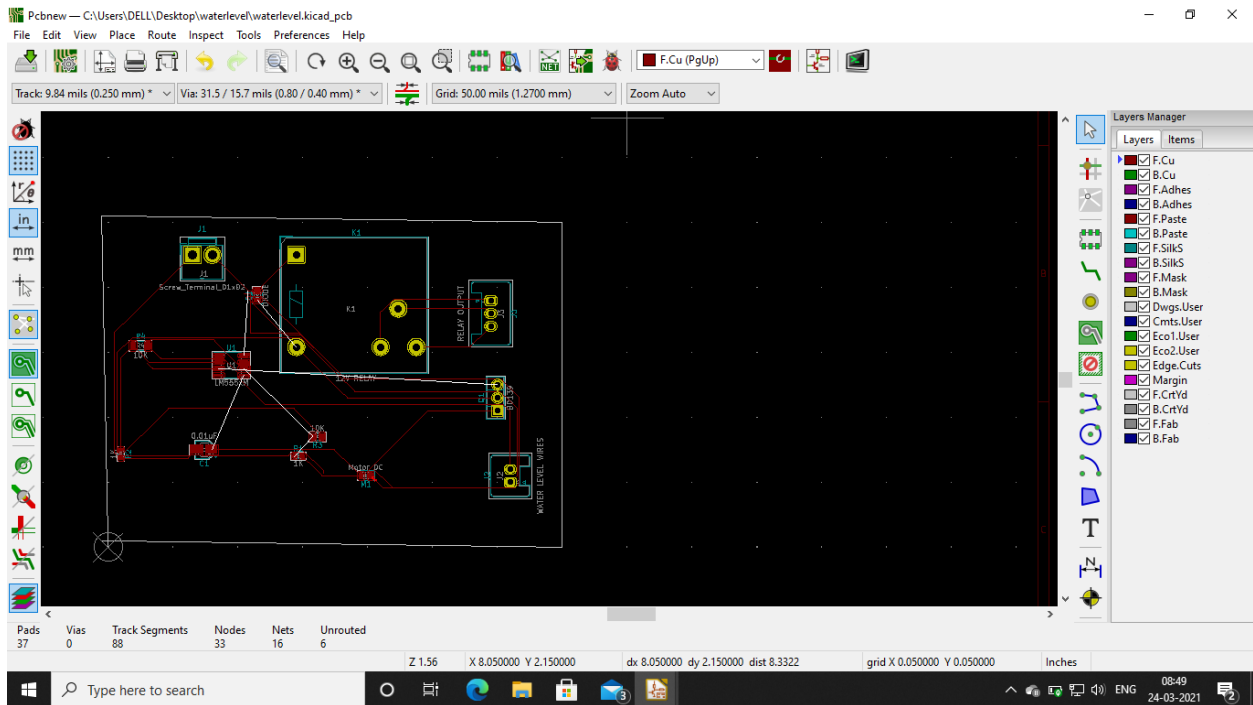
LDR is a Light Dependent Resistor whose value depends on the quantity of the light which is falling on it. It has a resistance of almost 1 mega ohm when it is in total darkness, but its resistance is about 5k ohms when exposed to full brightness. The IC 555 timer is used to control the operations of the circuit which acts as a comparator circuit with pin 6 connected to the positive terminal. The output goes high when the pin no. 2 i.e trigger pin goes one-third of the supply voltage. Similarly, its output goes to low when output is above one-third of the voltage. For detection of the amount of light, LDR is used as a resistor to adjust the circuit voltage.

PCB DESIGNING STEPS:

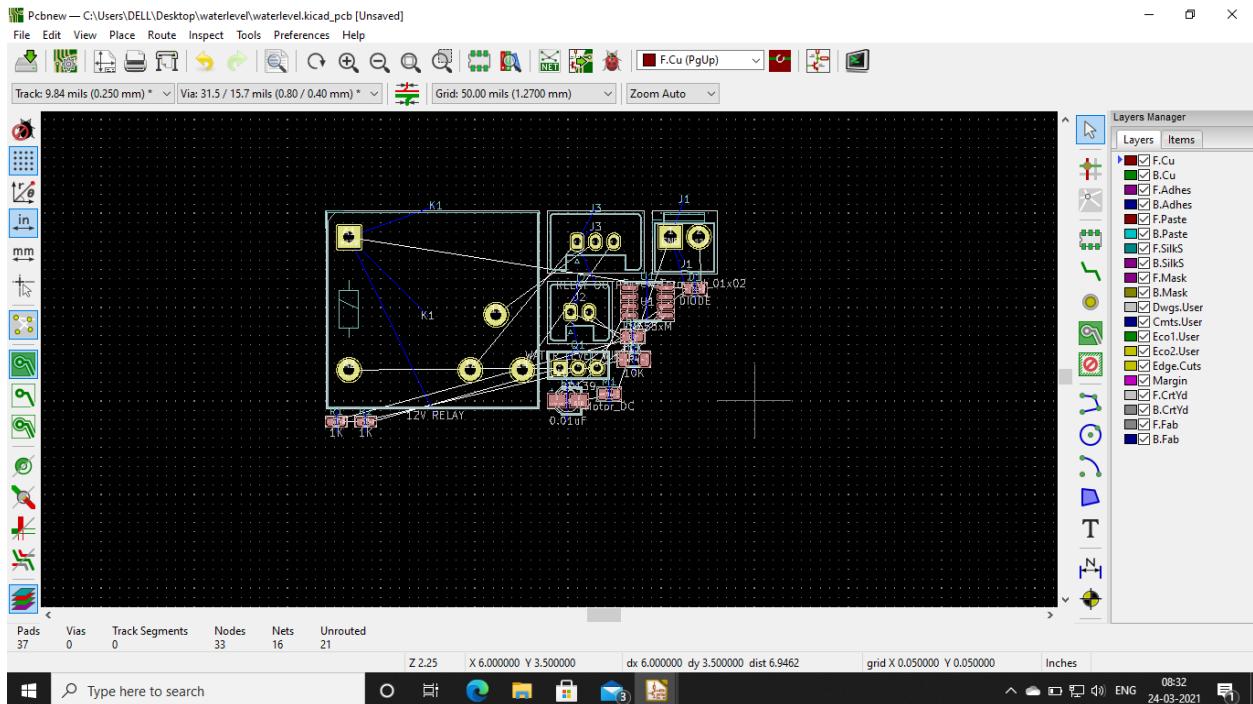
STEP NUMBER1:CREATING NORMAL CIRCUIT:



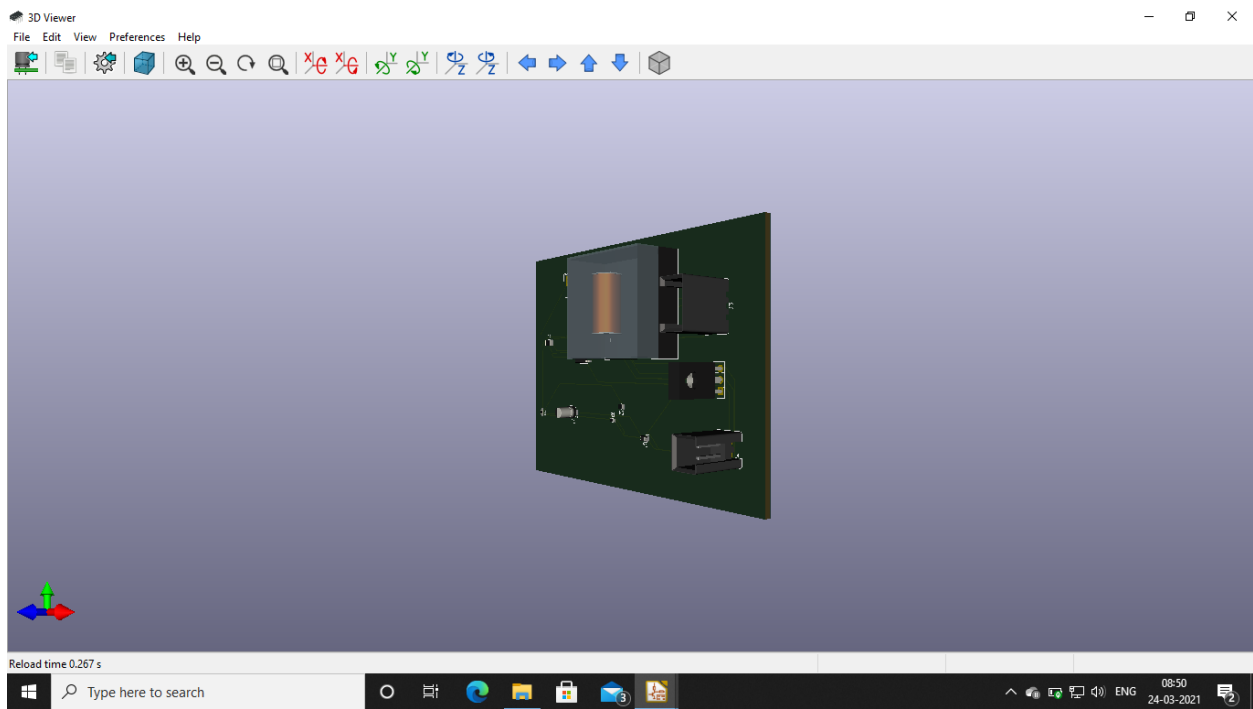
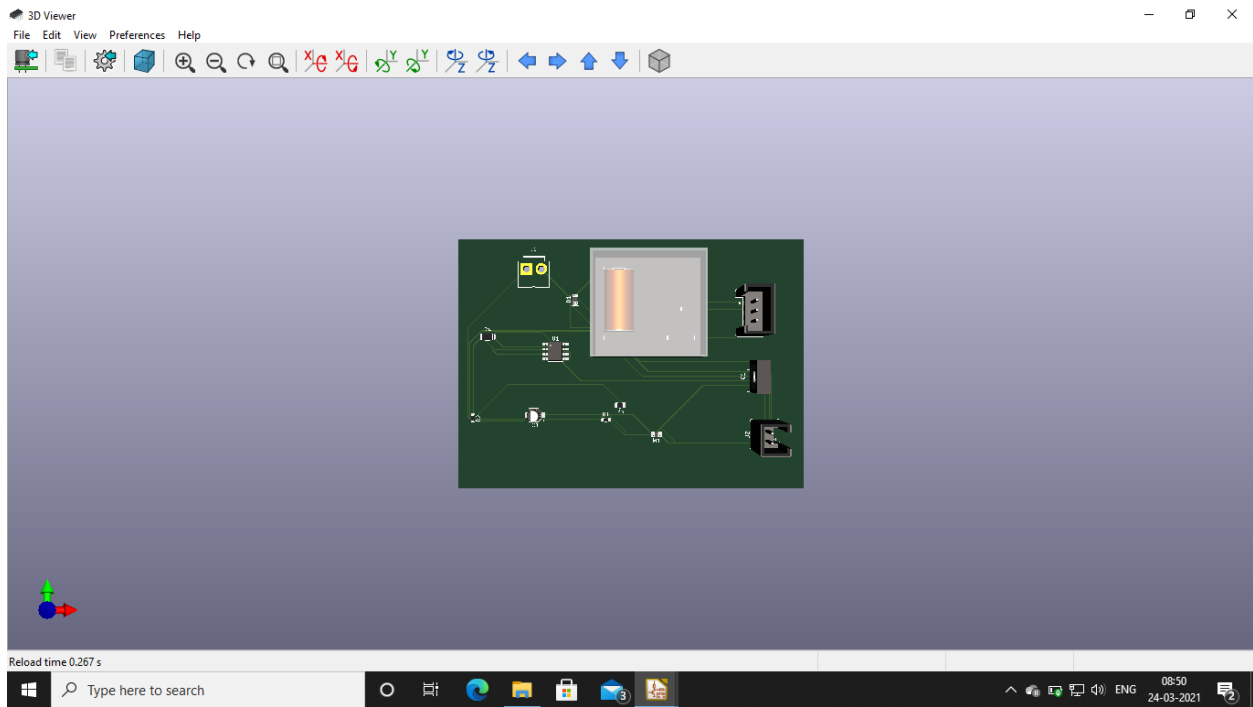
STEP NUMBER 2:CREATING LAYOUT DIAGRAM:

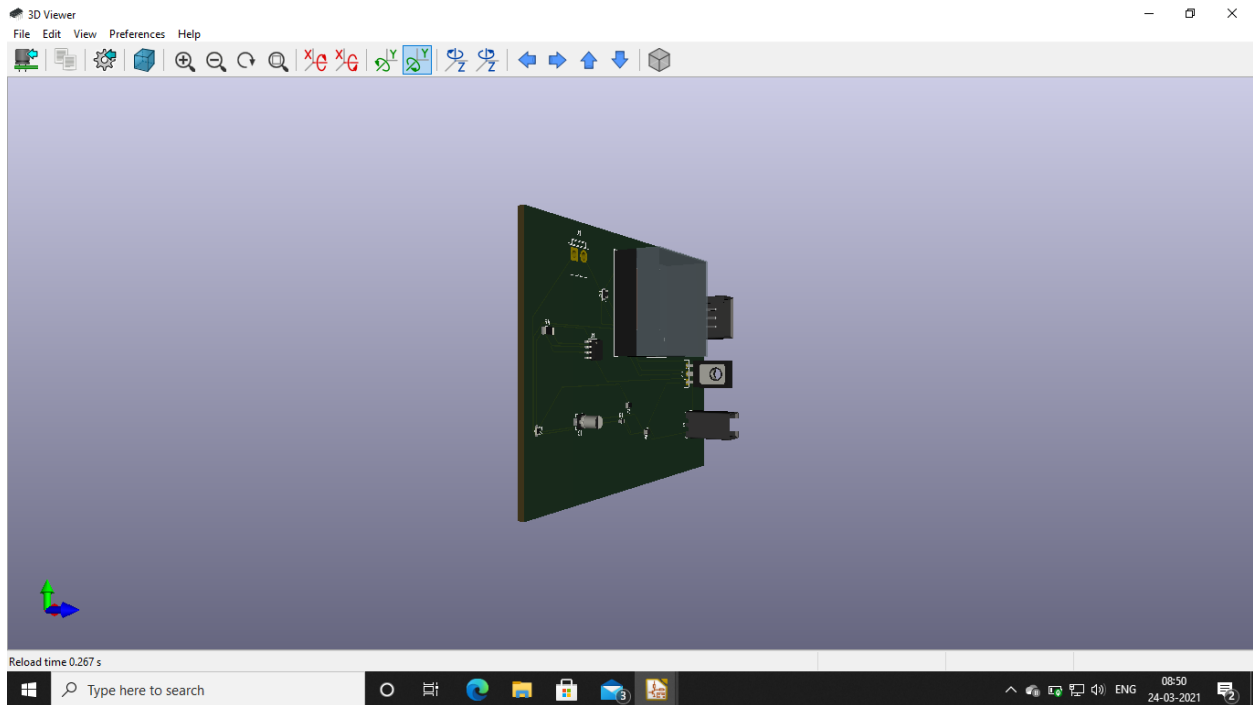


STEP NUMBER 3: CREATING PCB UPDATING



STEP NUMBER 4: 3D VIEW





STEP NUMBER 5: CREATING GERBER FILE:

