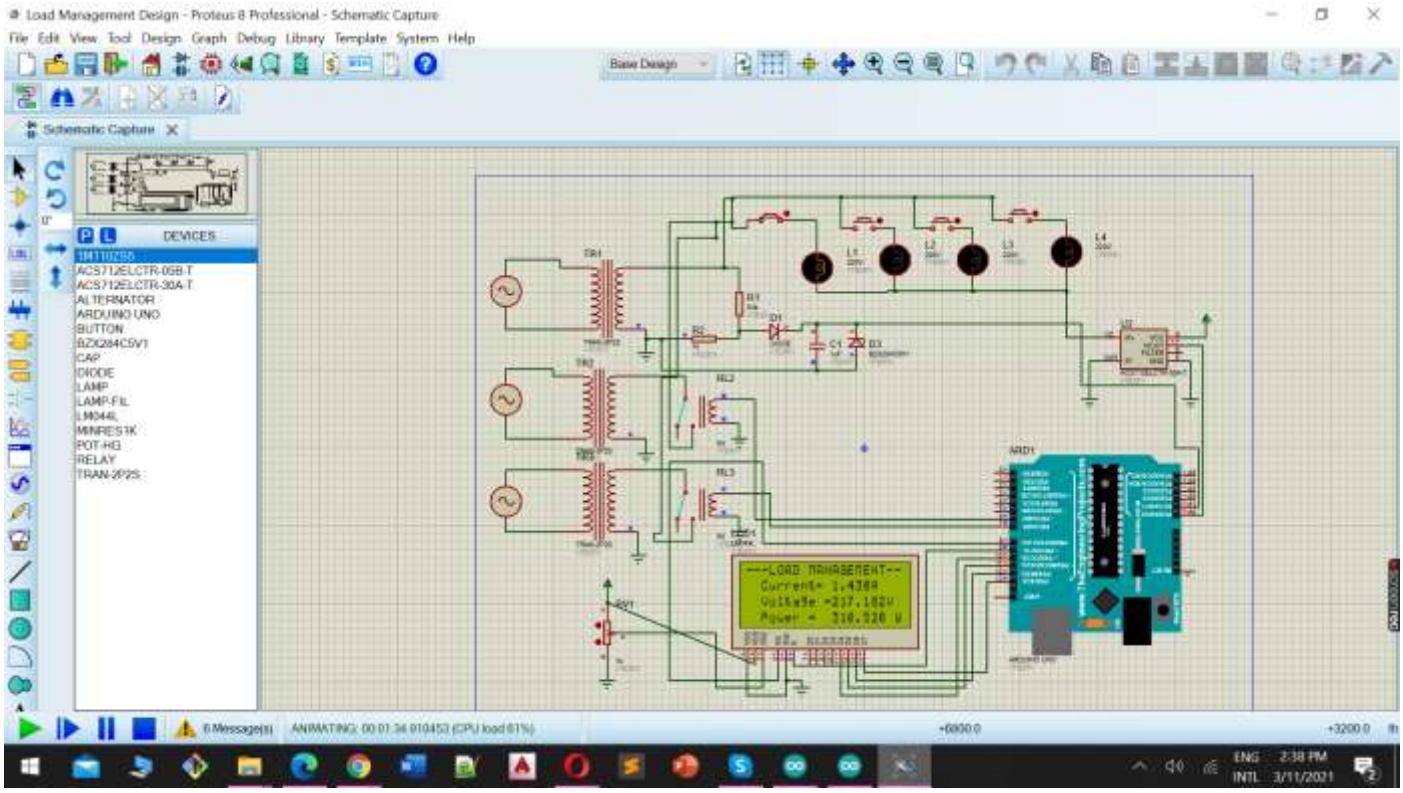
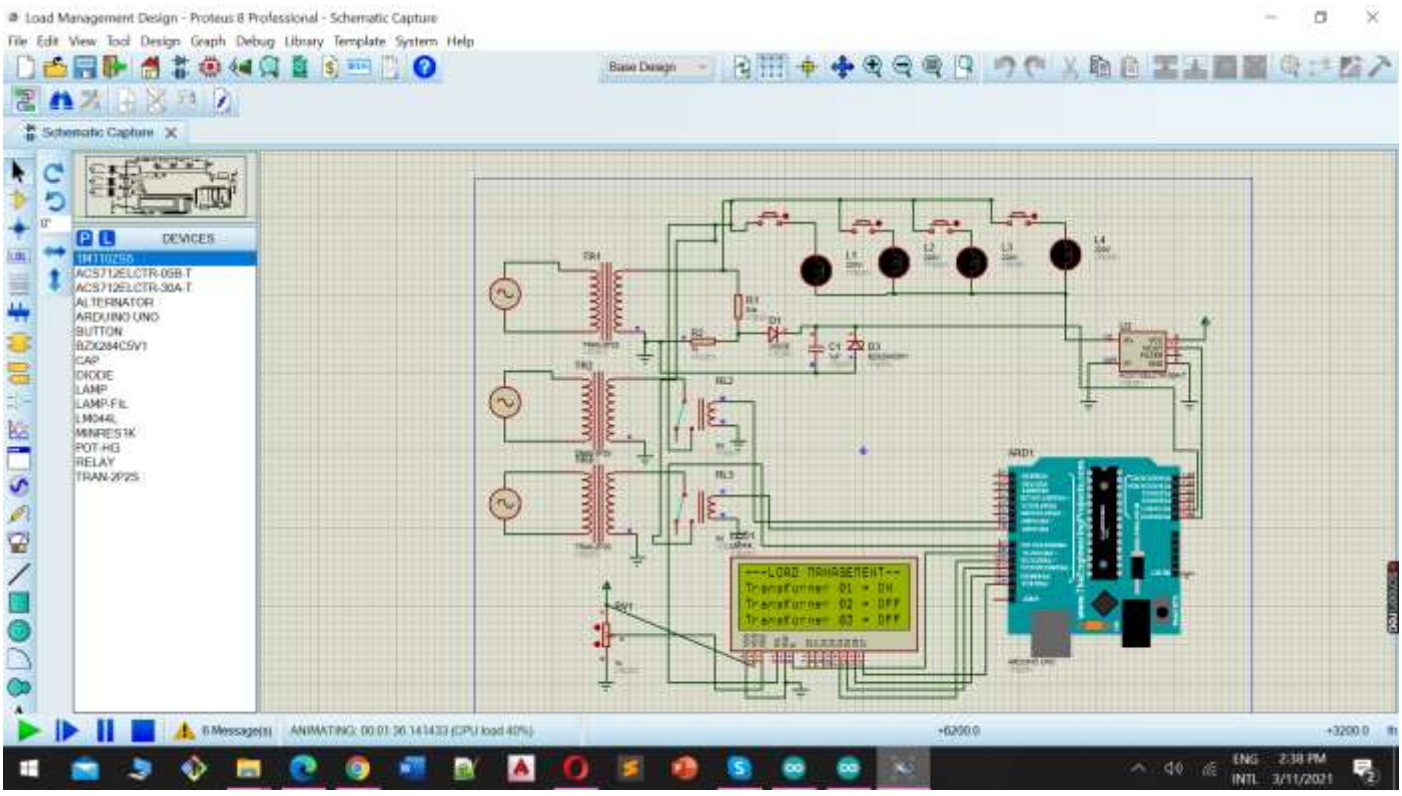
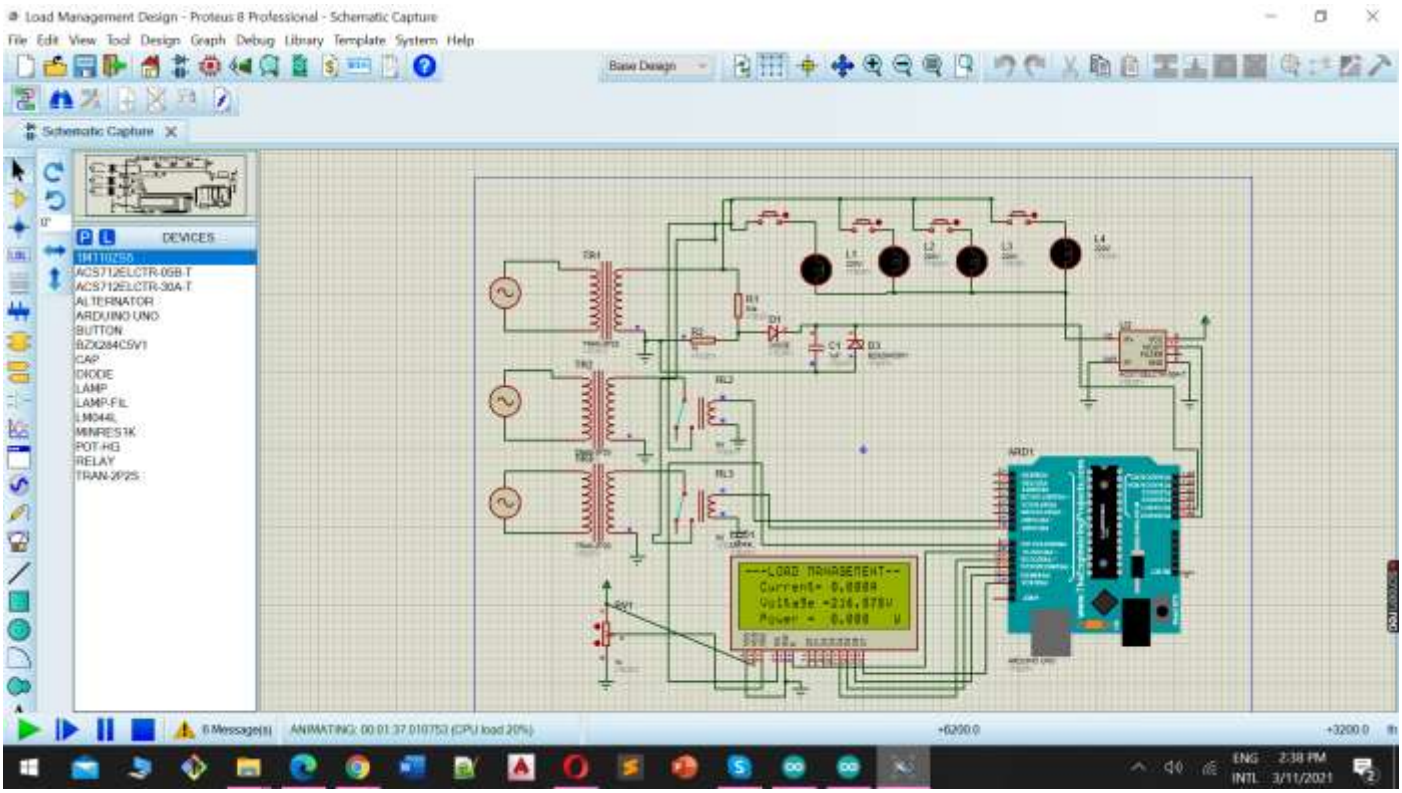
LOAD MANAGEMENT SYSTEM



Demostration:

Firstly, L1 which will remain open for the whole duration because of low current rating of this only lamp. It will not switch off until I will not .

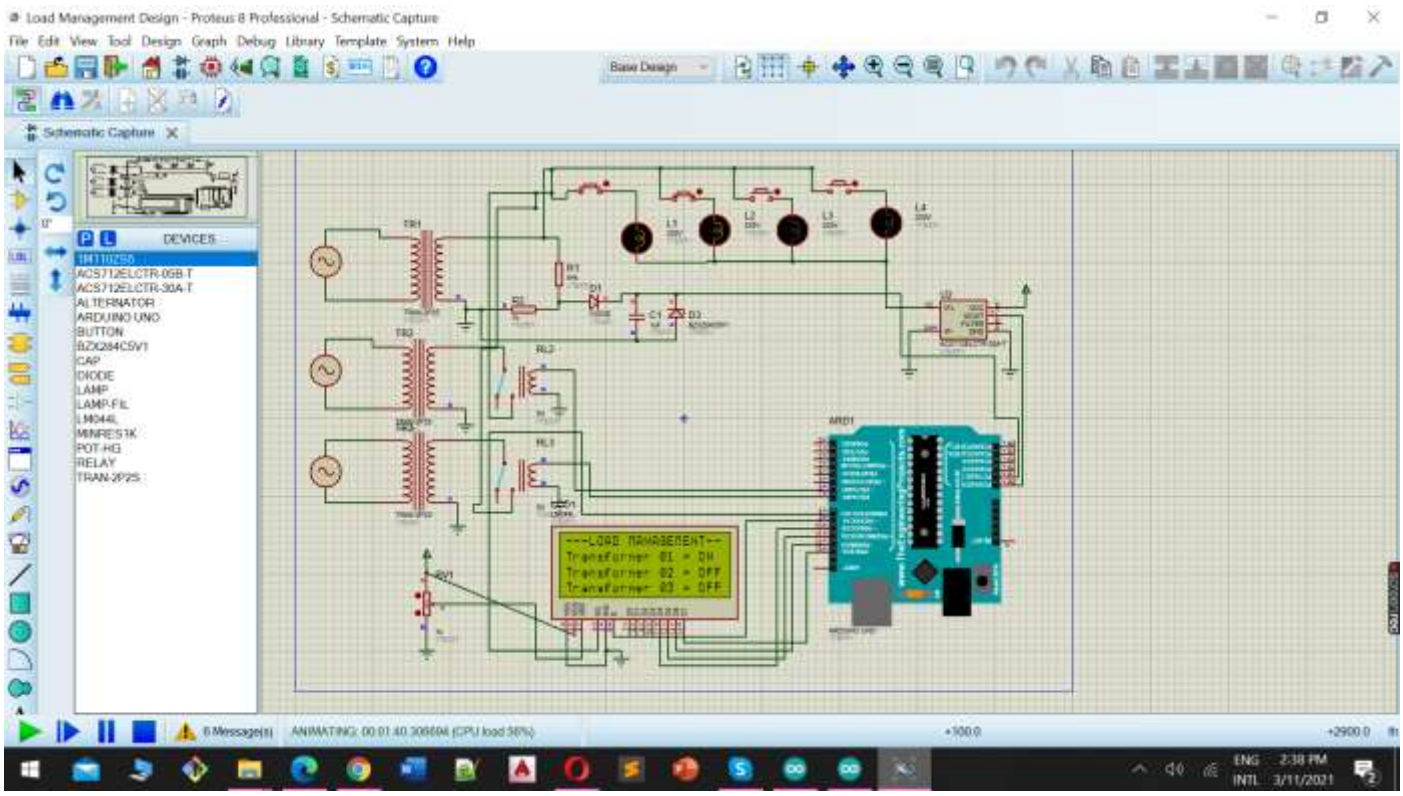


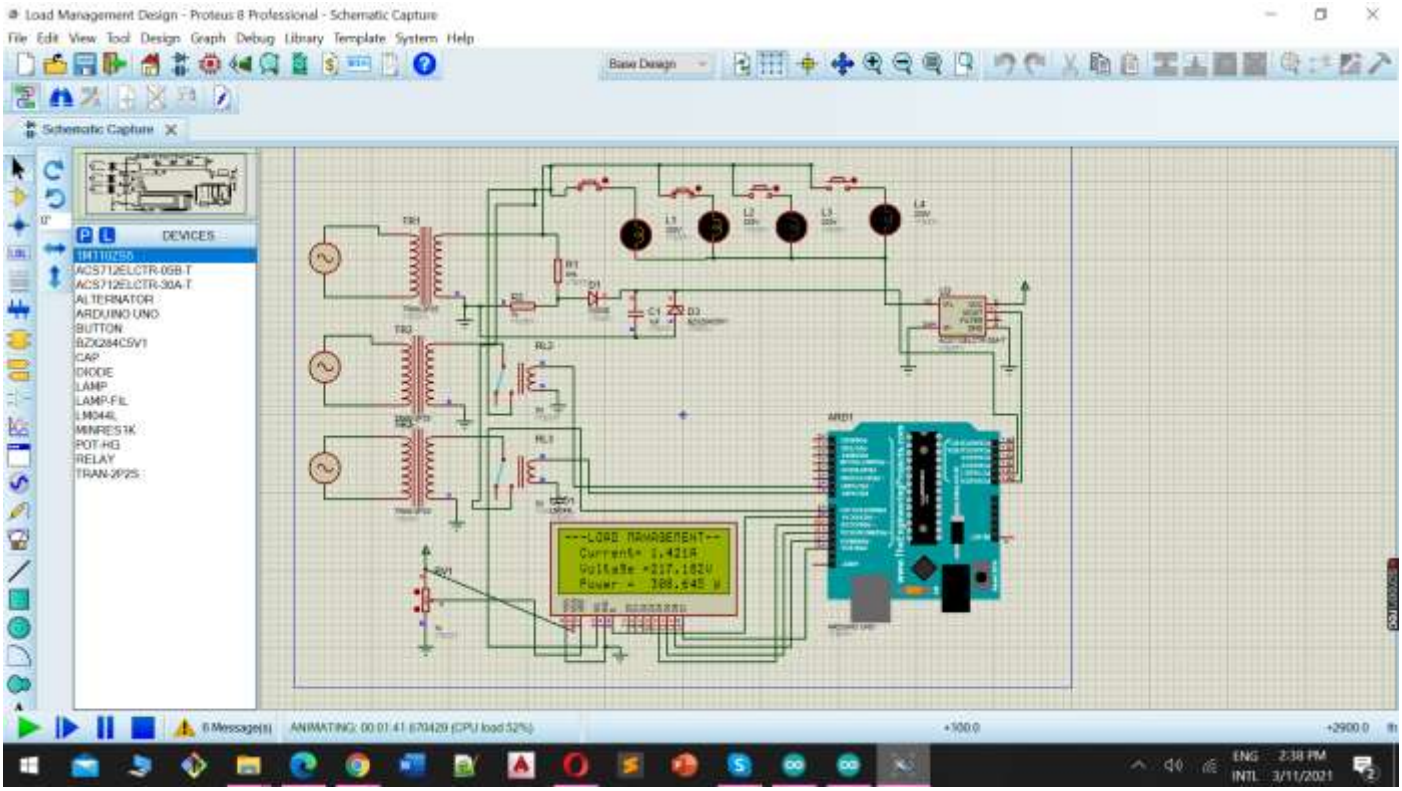


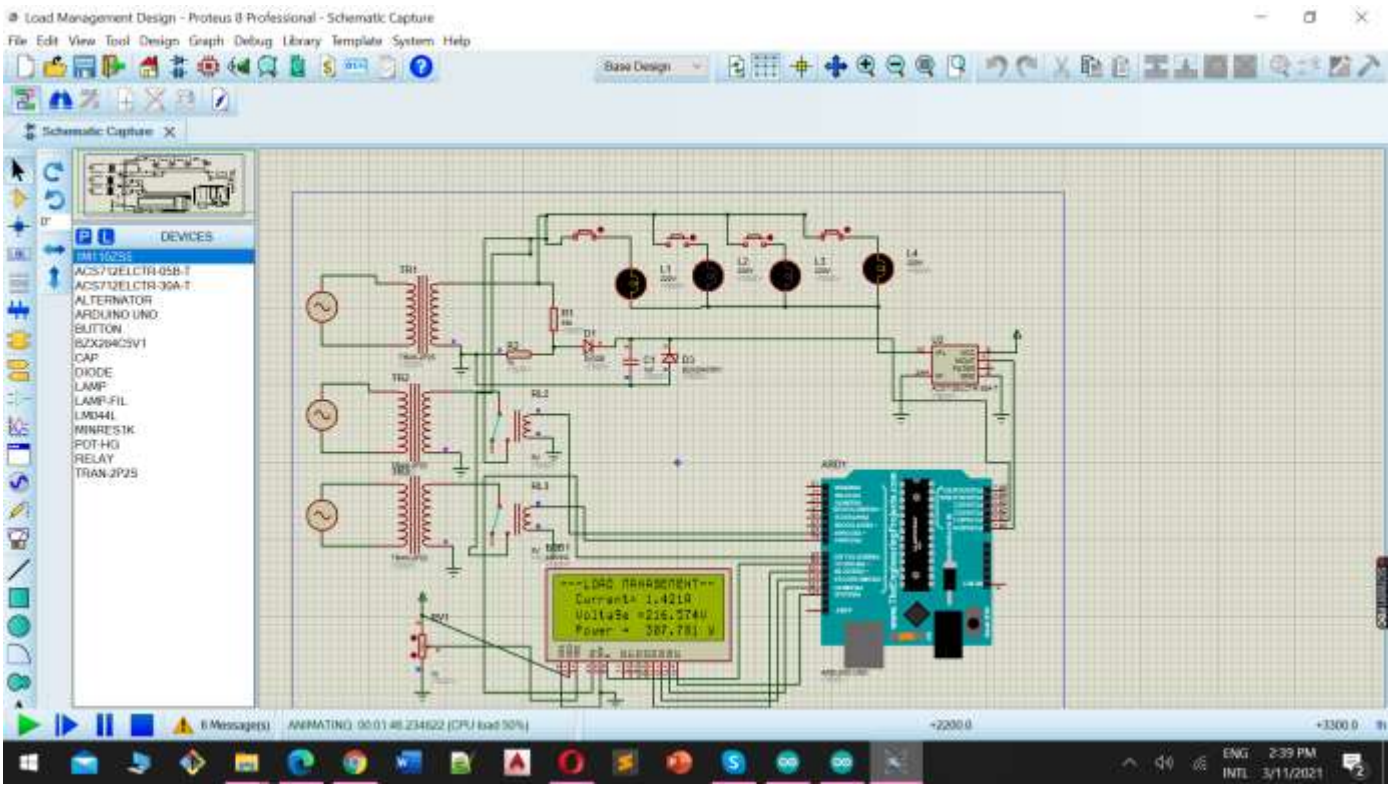
Then I switched off the lamp 1 there will be 0 current 0 voltage then there is no need of any relay to shut down or trip since all the devices are already off.

If current rating increases i.e; greater than the 6A then relay 1 would be High according to the code (or I should say relay 1 will trip and all other devices which are making current greater than 6A and are unnecessary will switched off.

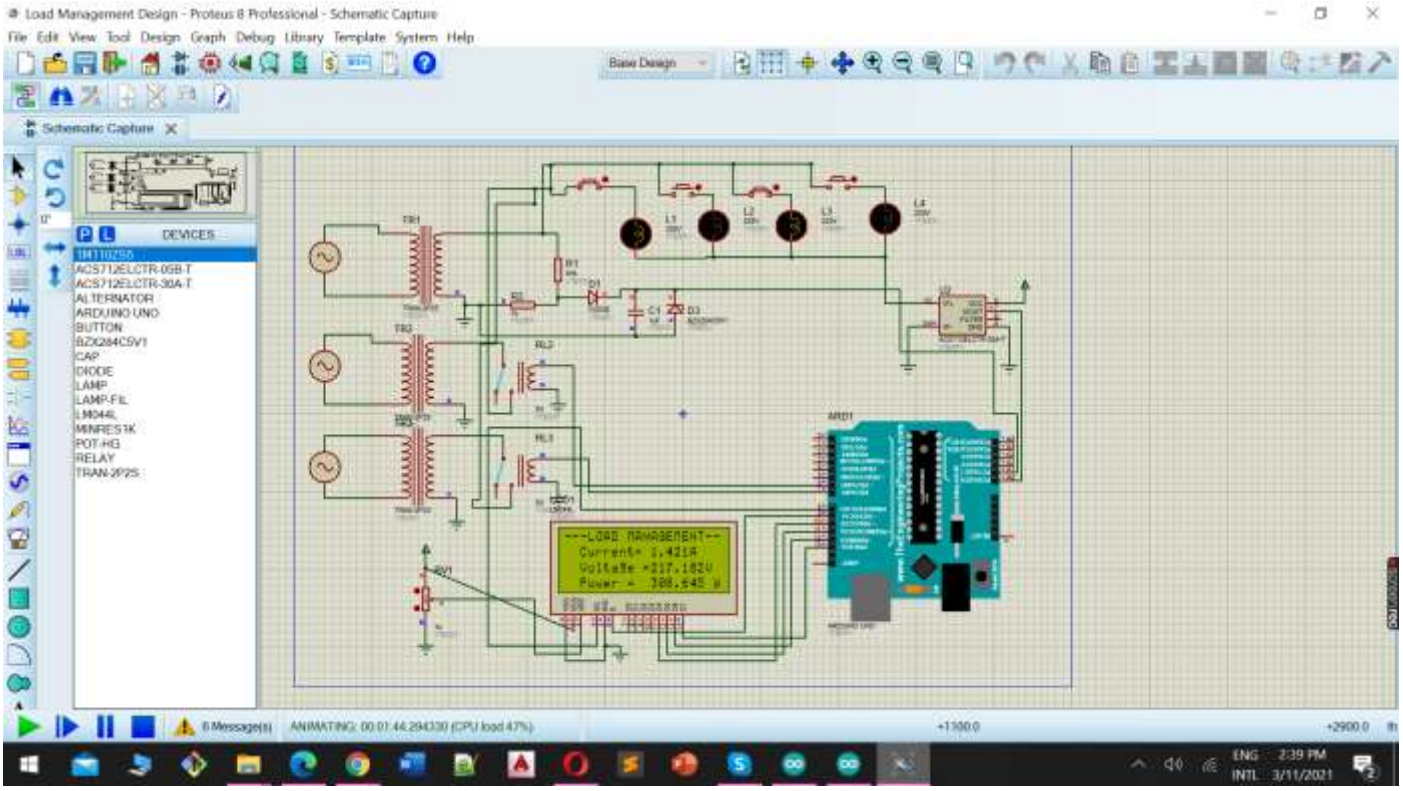
And suppose if the value of current increases greater than 12A then relay 2 will trip and all those devices connected with relay 2 will switch off until and unless current comes to its desired value.




Load Management Design - Proteus 8 Professional - Schematic Capture
File Edit View Tool Design Graph Debug Library Template System Help
Schematic Capture
DEVICES
1M1102S5
ACS712ELCTR-05B-T
ACS712ELCTR-30A-T
ALTERNATOR
ARDUINO UNO
BUTTON
BZX284C5V1
CAP
DIODE
LAMP
LAMP-FIL
LM044L
MINRES1K
POT-HG
RELAY
TRAN-2P2S
---LOAD MANAGEMENT--
Current= 1.421A
Voltage =217.182V
Power = 308.645 W
6 Message(s)
ANIMATING: 00:01:41.870420 (CPU load 52%)
ENG
INTL
2:38 PM
3/11/2021



Like in above two cases I have picture I have kept on L1 and L2 but as shown in the LCD display that current rating is still < 6 and <12 too so relay1 and relay will remain low means will remain off and both the lamps will keep switched on until we want.



Similarly, here in above picture I have kept on L1 and L3 but as shown in the LCD display that current rating is still < 6 and <12 too so relay1 and relay will remain low means will remain off and both the lamps will keep switched on until we want.