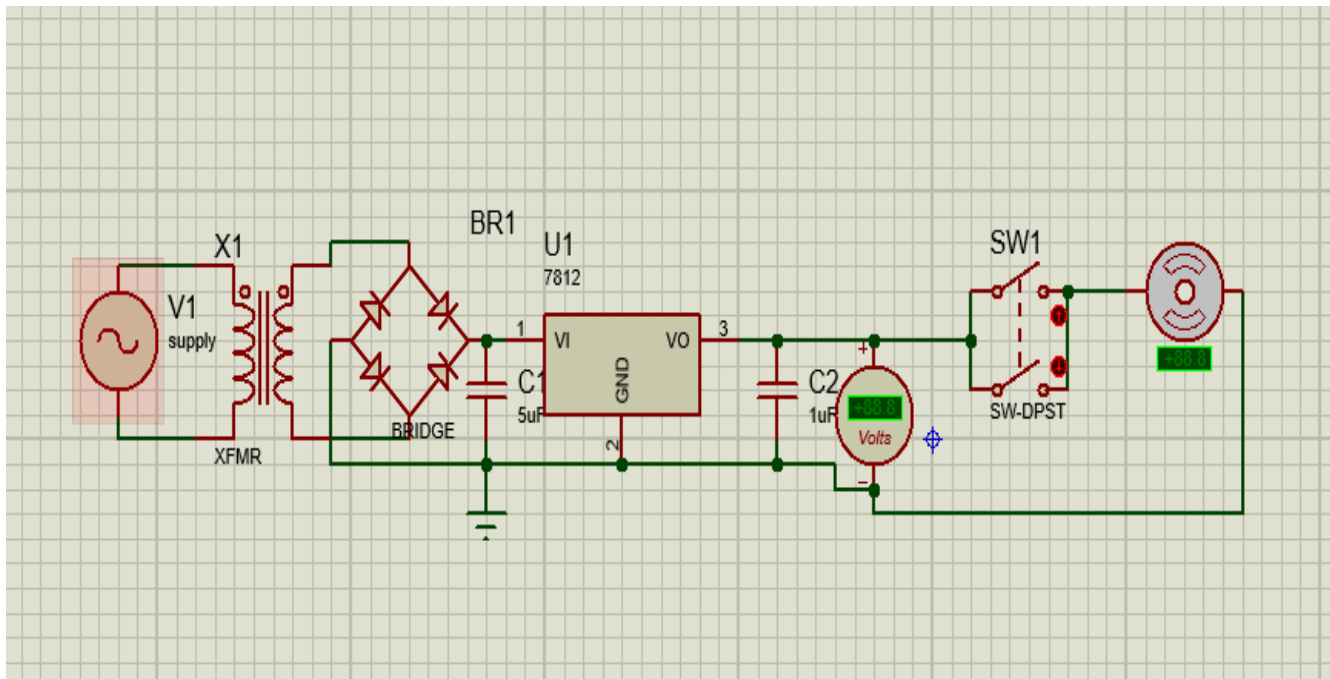


# TASK 3 H.W

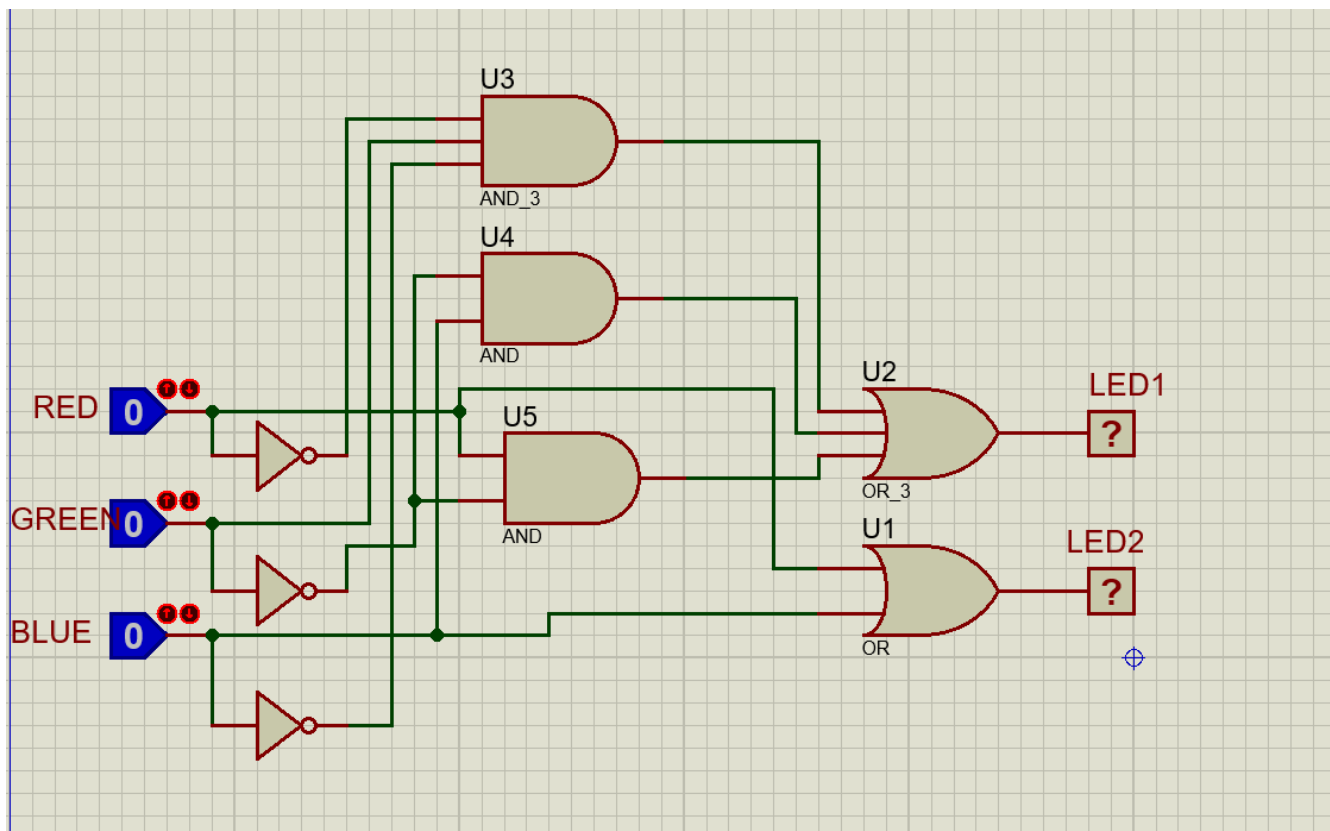
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Aly Muhammed Elruby

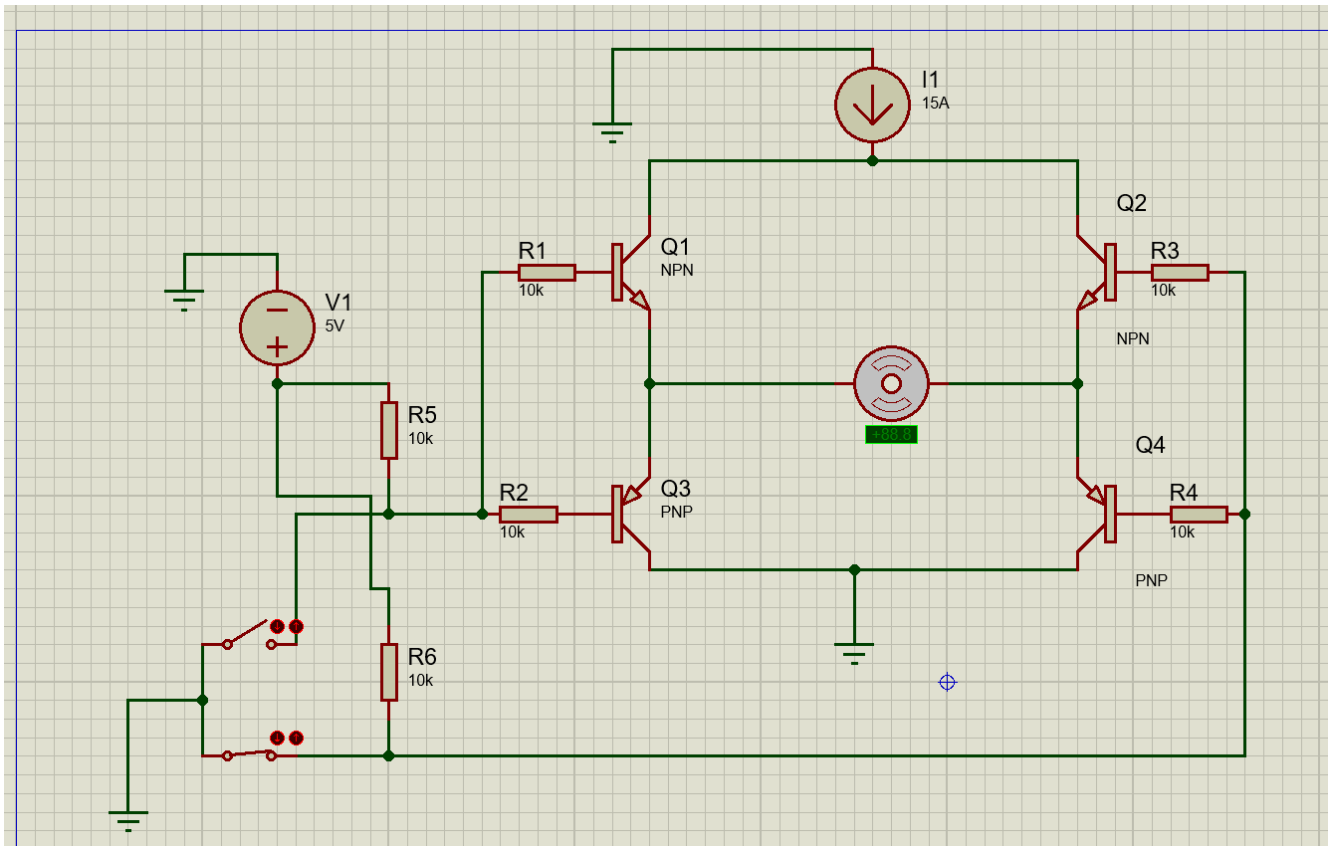
## Problem 1:



## Problem 2:



### Problem 3:



Q1: What type of transistors have you used and why?

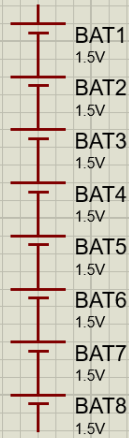
-I didn't find a power transistor can bear 15 A in protues so I used a generic transistor, but in real I have found many power transistor can bear 15A like MJL3281AG it is a BJT 15A 230V 200W NPN.

Q2: If the current of the motor is reduced to 10A can we use a different type of switches?

-I don't understand the question but in general we can use toggle switch

## Problem 4:

Each cell 1.5V with 18000mWh Cspacity so the connection can deliver 6 amp for 3 hour



- D alkaline batteries were used with 18000mWh capacity.
- 8cells in series to get 12 volt and can supply 6 A for 3 hours.
- we could use 12v batteries but it's capacity is much worse than 1.5 AA batteries and couldn't deliver 6 A for long time.

