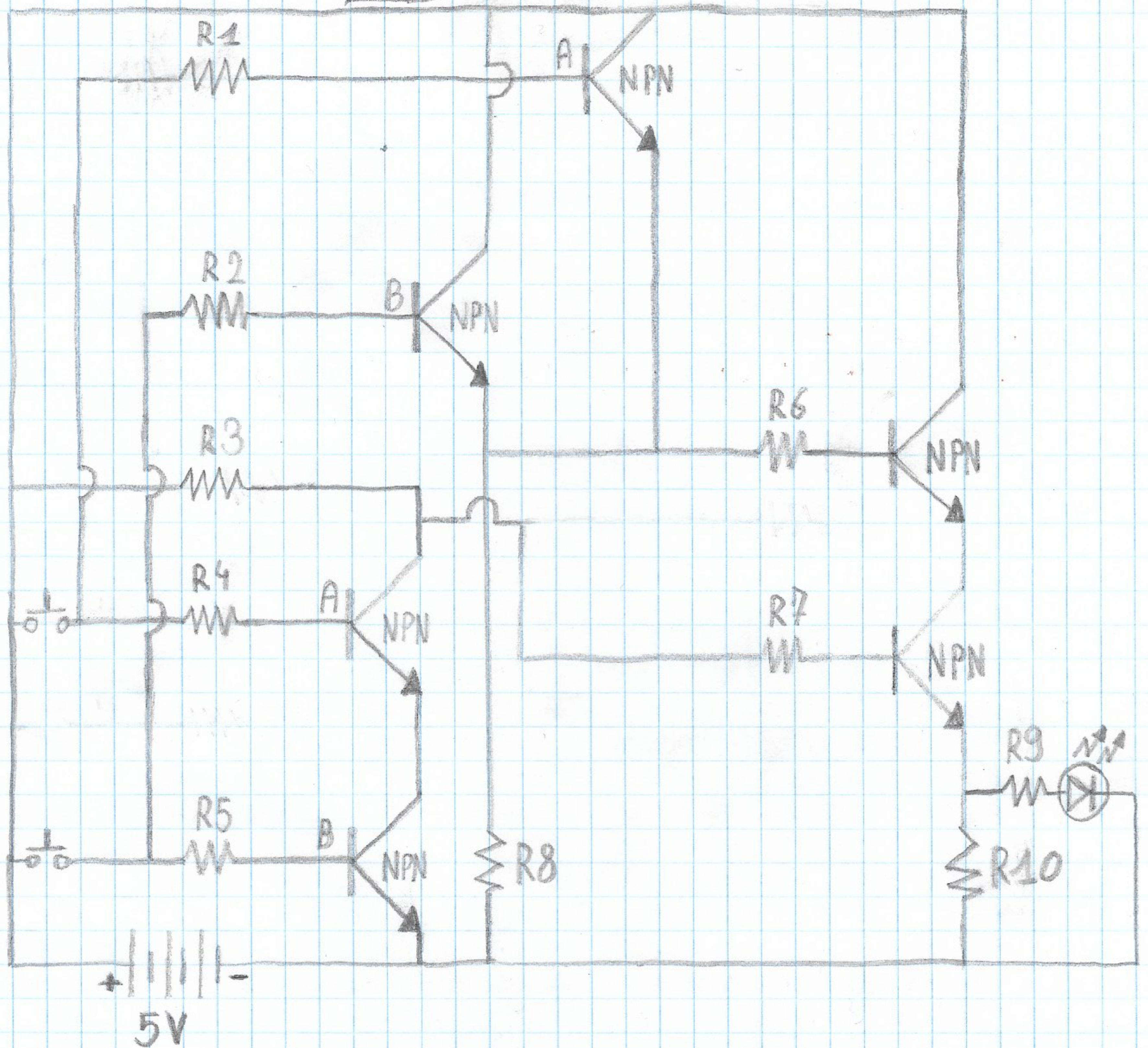
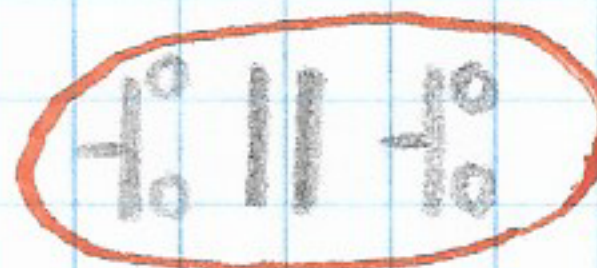


Logic gates:  
'XOR' GATE:



R1, R2, R4, R5, R6, R7, R8, R10: 1K  $\Omega$  used.

R3, R9: 100  $\Omega$  used.



push one of the buttons; that creates a closed circuit that includes the led.  
 push both of the buttons to create a closed circuit that excludes the led.

truth table:

| A | B | OUT |
|---|---|-----|
| 0 | 0 | 0   |
| 0 | 1 | 1   |
| 1 | 0 | 1   |
| 1 | 1 | 0   |