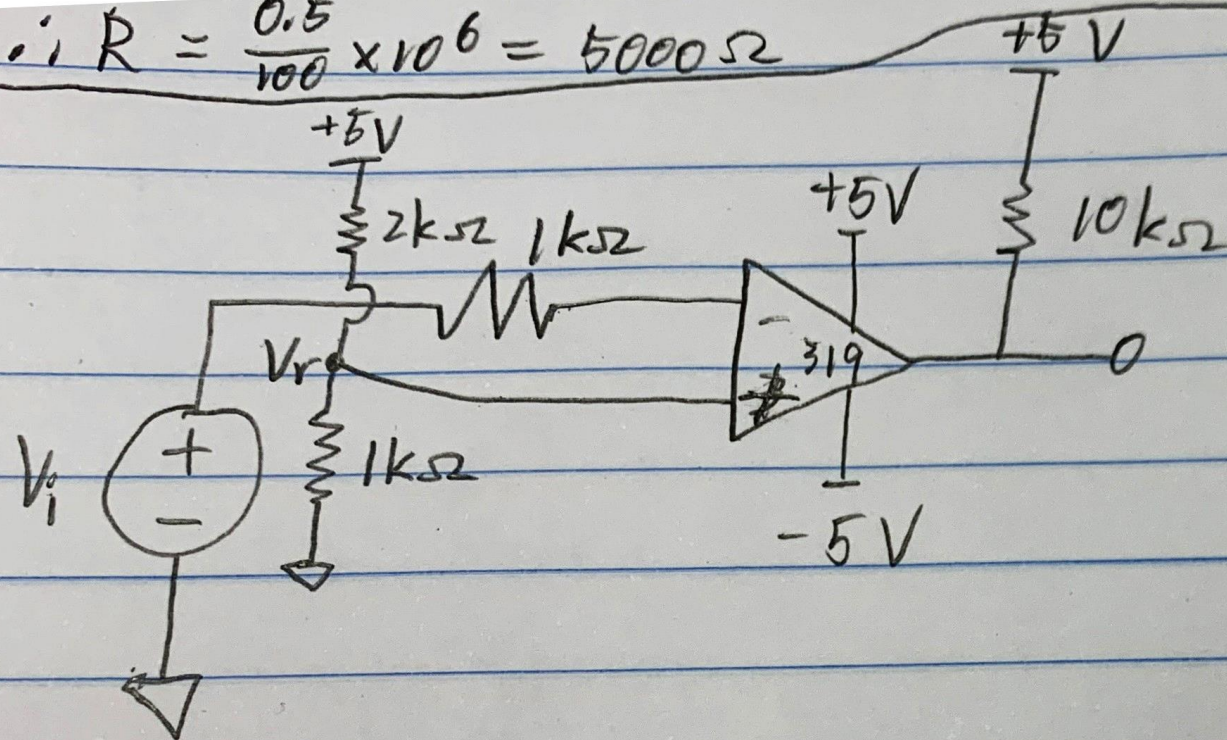


$$\therefore R = \frac{0.5}{100} \times 10^6 = 5000 \Omega$$



By voltage divide

$$V_r = \frac{5 \times 1k\Omega}{2k\Omega + 1k\Omega} = 1.66 V$$

If  $V_i$  drop below  $V_r$ , output of comparator change from high to low  
 So threshold input volt  $V_i = V_r = 1.66 V$