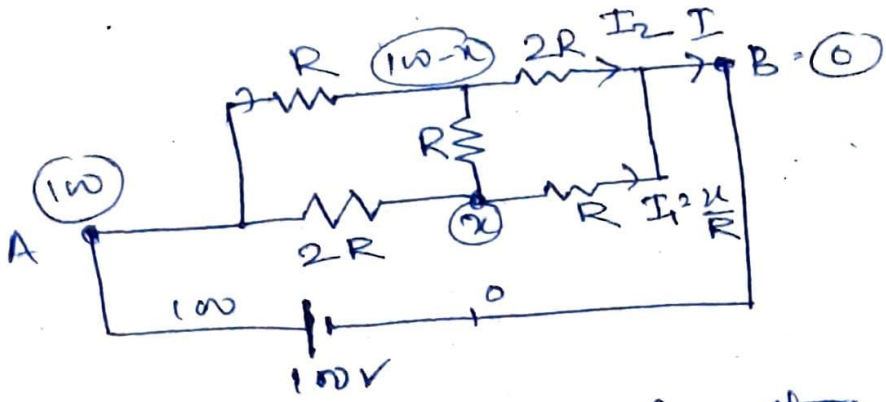

Applying KCL at node ~~A~~ x

$$\frac{x-100}{2R} + \frac{x-0}{R} + \frac{x-(100-x)}{R} = 0$$

$$\Rightarrow x-100+2x+2(x-100+x) = 0$$

$$\Rightarrow 7x = 300 \Rightarrow \boxed{x = \frac{300}{7}}$$

$$100-x = 100 - \frac{300}{7} = \frac{400}{7}$$

$$I = I_1 + I_2 = \frac{300}{7R} + \frac{400}{7\cdot 2R} = \frac{500}{7}$$

Hence Resistance across AB $R_{AB} = \frac{100}{I} \frac{V}{I}$

$$= \frac{100}{\frac{500}{7R}} = \frac{7R}{5}$$ Ans