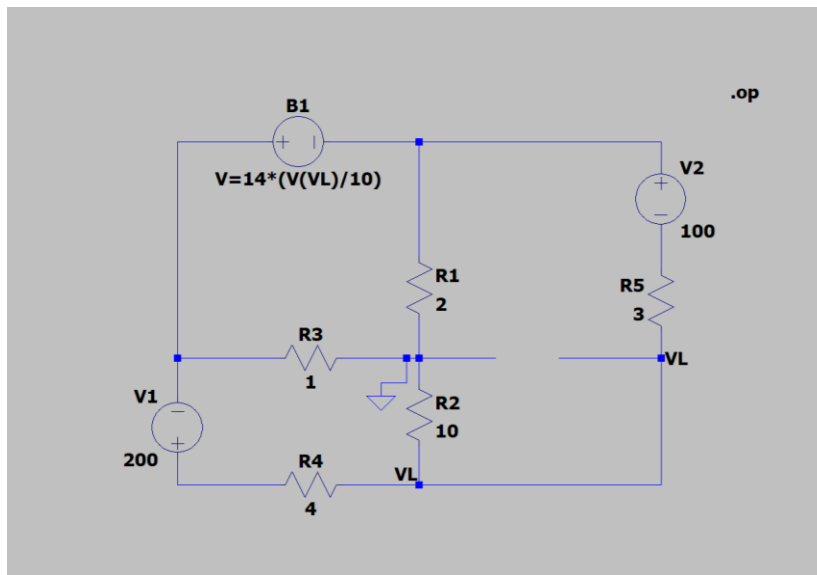
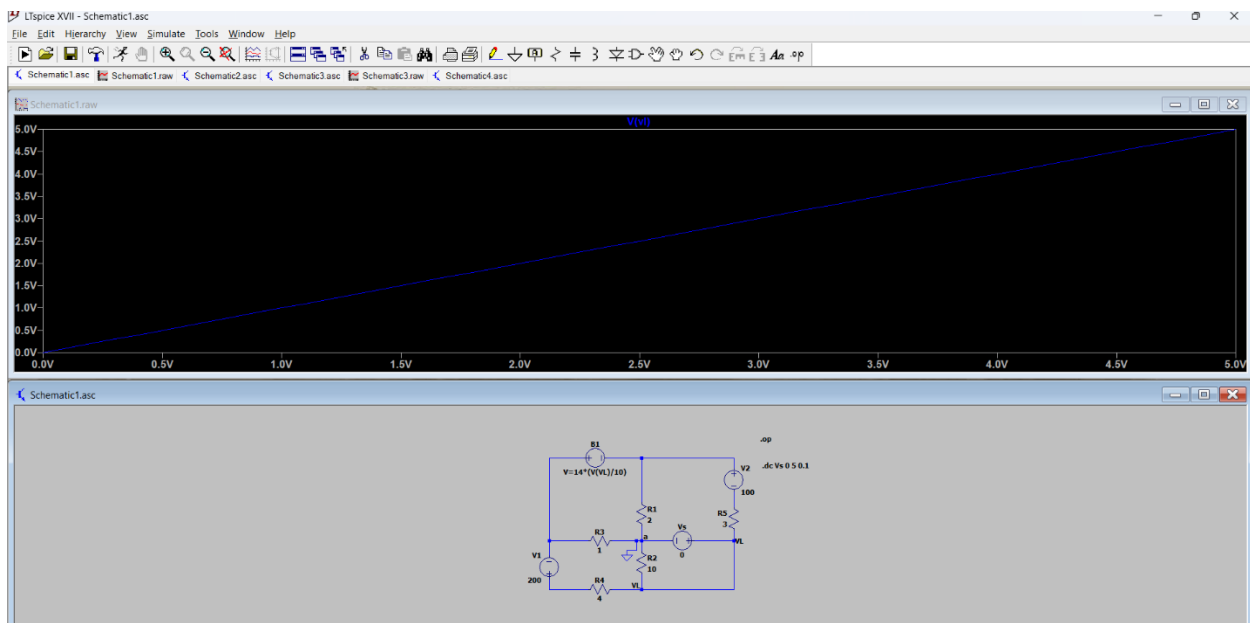


Drawing Given circuit on LTspice:



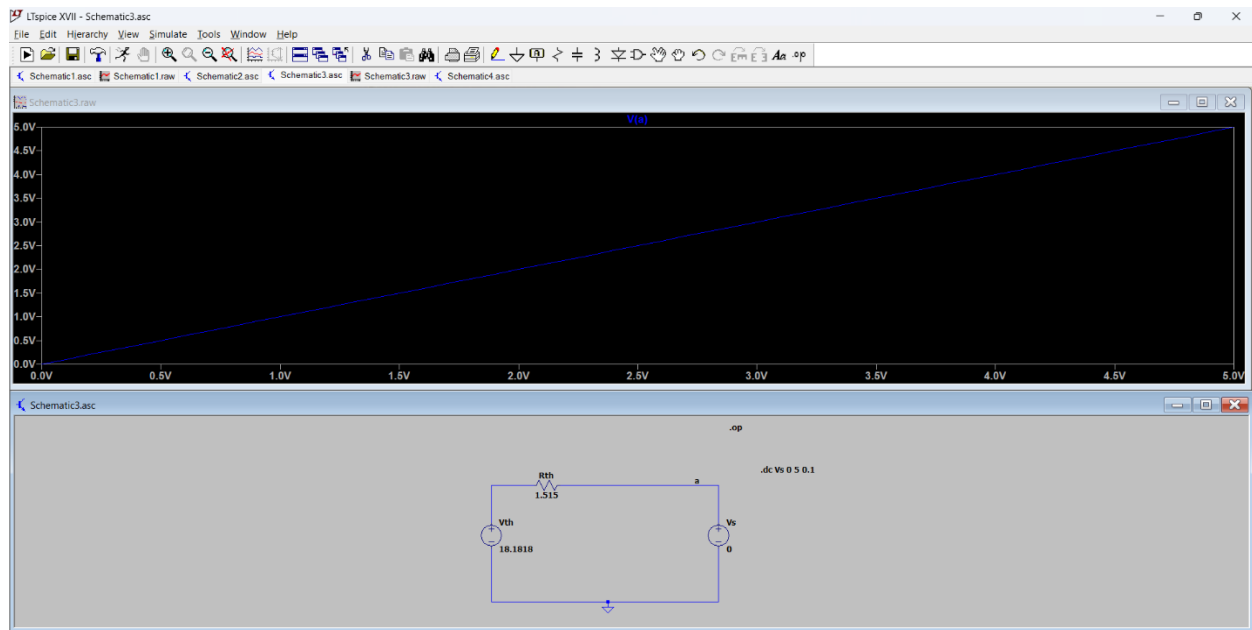
I-V characteristic of the given circuit:



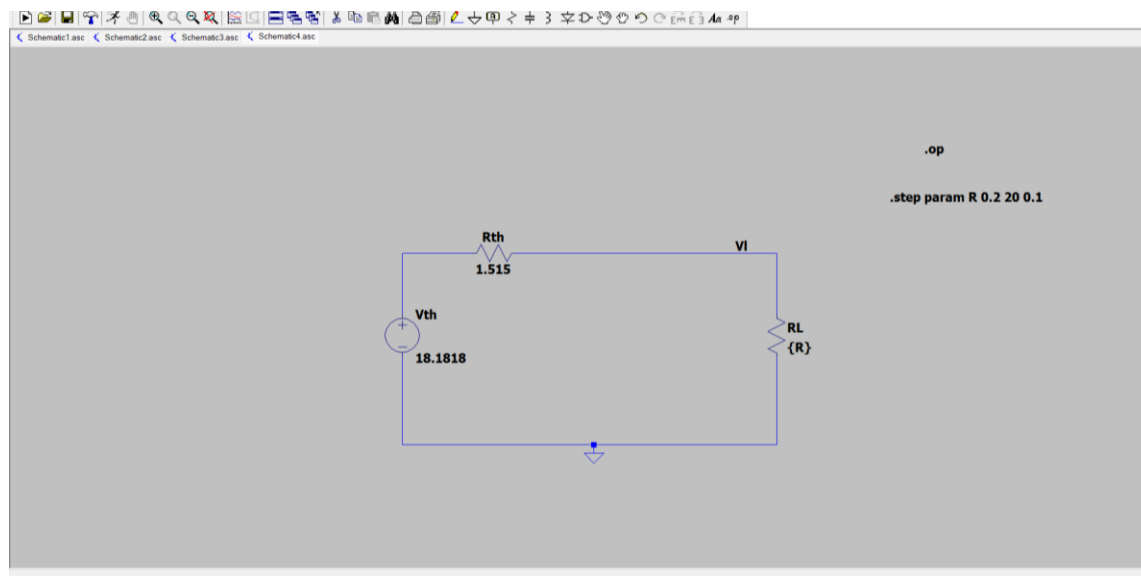
$V_{th} = 18.1818V$

$R_{th} = 1.515 \text{ ohm}$

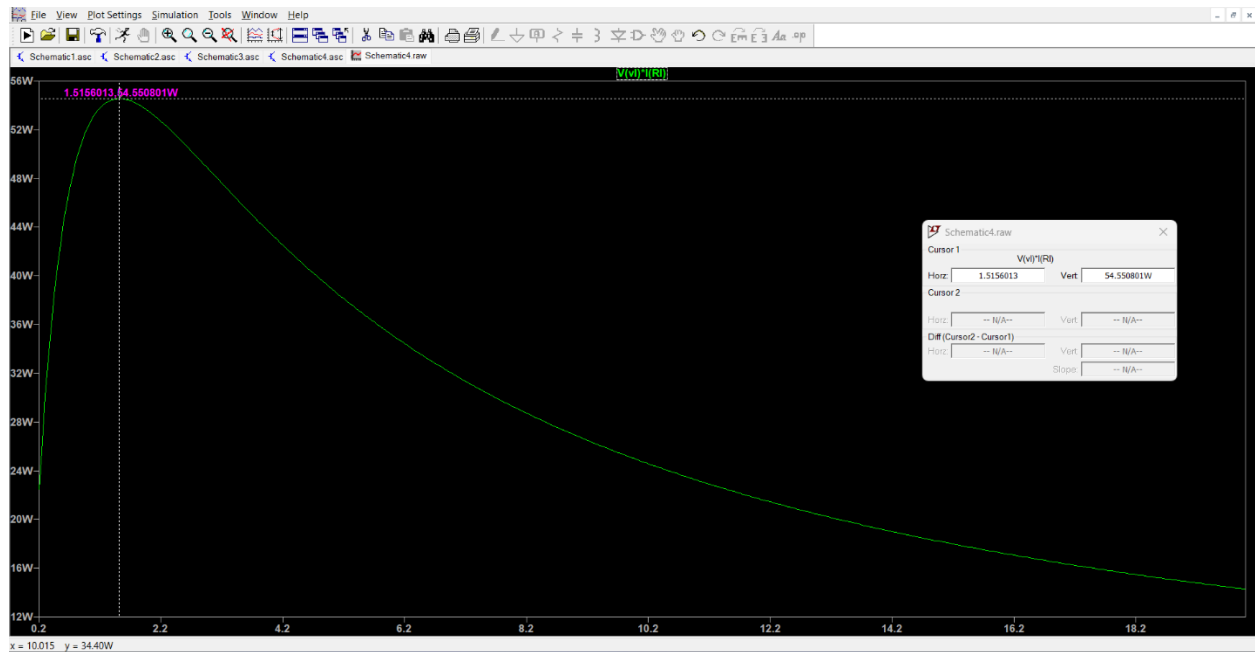
I-V characteristic of the Thevenin's equivalent circuit:



Thevenin's equivalent circuit:



## Maximum power transfer theorem using LTspice:



$$V_{th} = 18.1818V$$

$$R_{th} = 1.515 \text{ ohm}$$

$$P_{max} = (V_{th})^2 / (4 * R_{th})$$

$$= 18.1818 * 18.1818 / (4 * 1.515)$$

$$= 54.55W$$