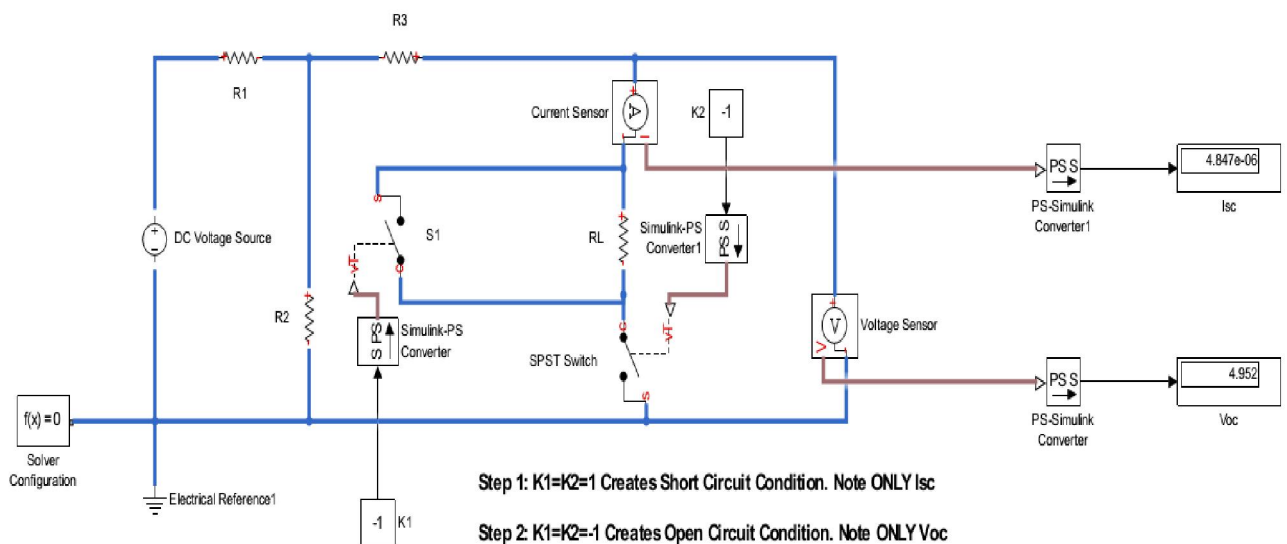


Exp 4: Thevenin Theorem

Step 1: Create a Simulink model as below using the following components

- A. Constant Blocks K1 and K2
- B. SPST Switches S1 and S2
- C. Simulink-PS Converter
- D. Display Block.
- E. PS-Simulink Converter
- F. Resistances ($R_1=R_2=10K$, $R_3=5K$, $R_L=22K$)
- G. DC Voltage Source (10V)
- H. Solver Configuration.



Step 2: Find R_{th} by inspection.

Step 3: Find Short Circuit Current (I_{sc})

Step 4: Find Open Circuit Voltage (V_{oc})

Step 5: Compute V_{oc}/I_{sc} and Verify it from the Circuit components.

Step 6: Change R_3 to 10K and Re-validate.