

Problem 1

Consider an RC circuit shown in figure below.

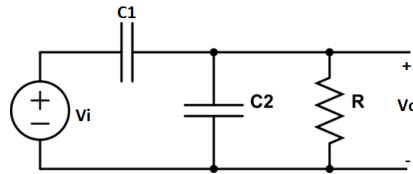


Figure 1: An RC Circuit

Using transfer function method, find $v_o(t)$ if a DC input voltage of 2 V is applied at $t = 0$ s and $v_o(0) = 0.5$ V. Use $R = 100$ k Ω , $C_1 = 500$ nF and $C_2 = 500$ nF.