

# **Diseño de sensores inteligentes para el monitoreo en tiempo real de la calidad del agua.**

## **Segundo avance Resultado de simulaciones**

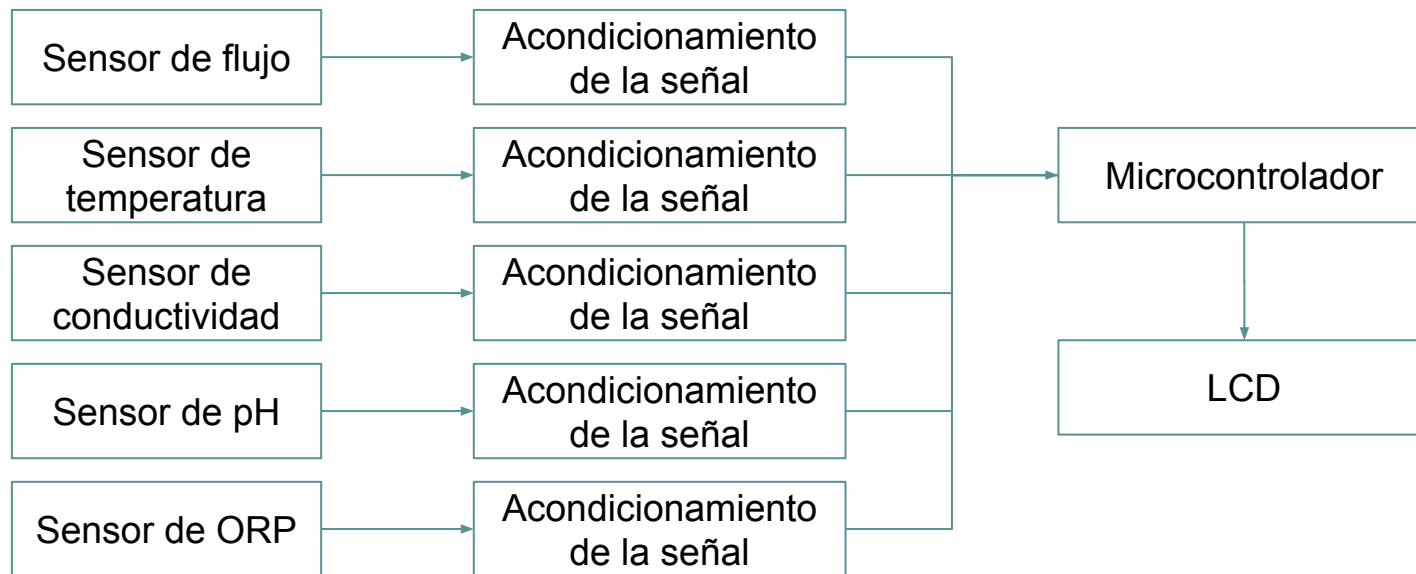
### **Equipo:**

- **Arteaga Lara Samuel de Jesus**
- **Mendoza Jaimes Ian**
- **Monroy Martos Elioth**
- **Saldaña Aguilar Andrés Arnulfo**

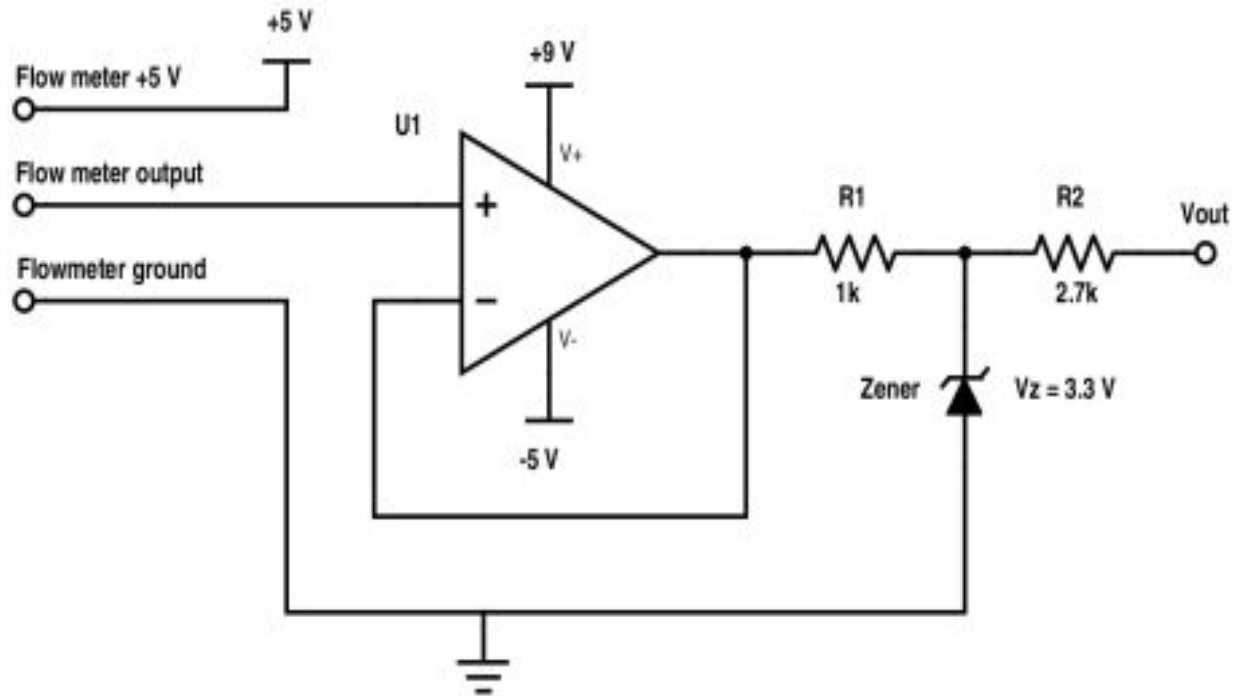
**Recordando...**

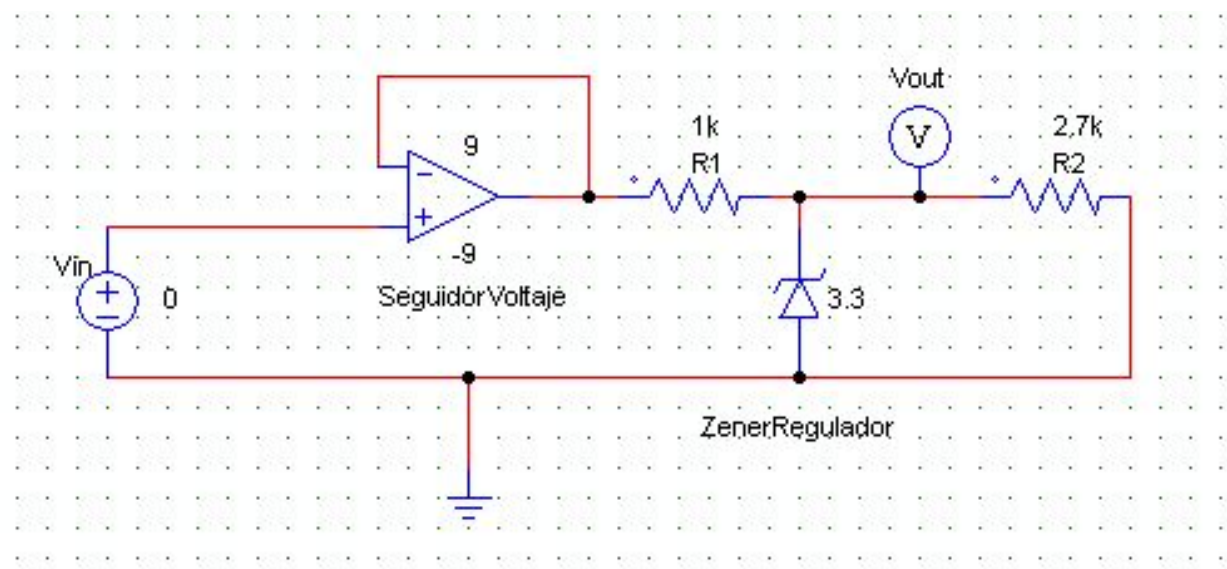
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# Diagrama general del sistema

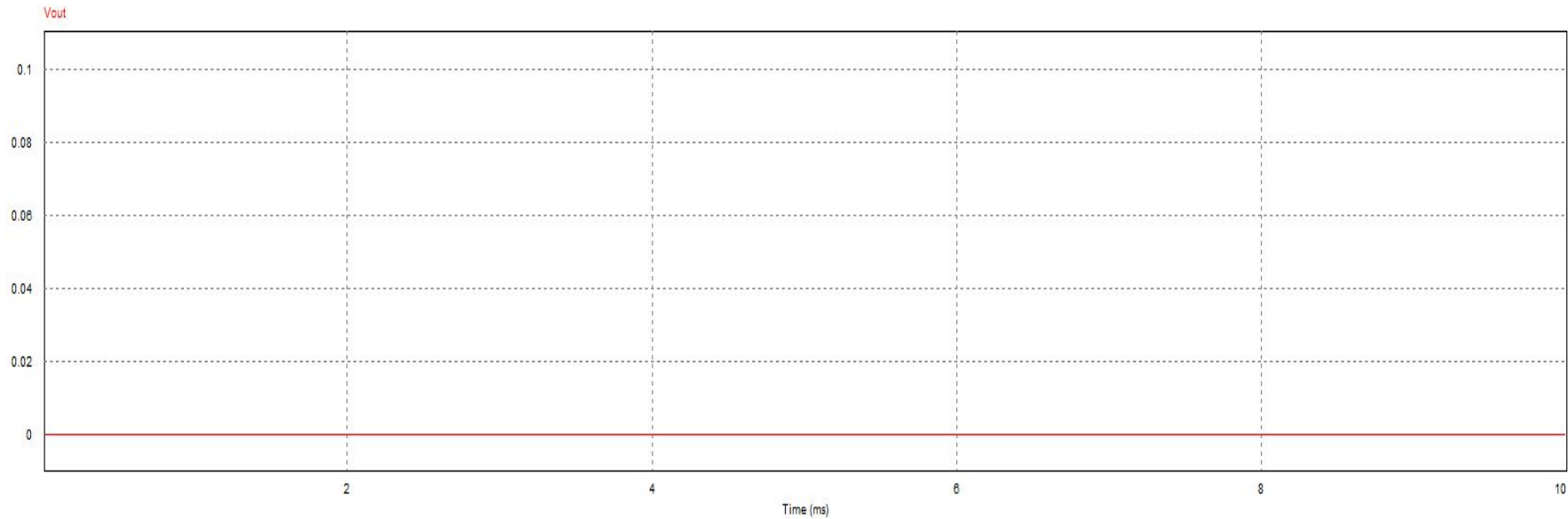


# Sensor de flujo

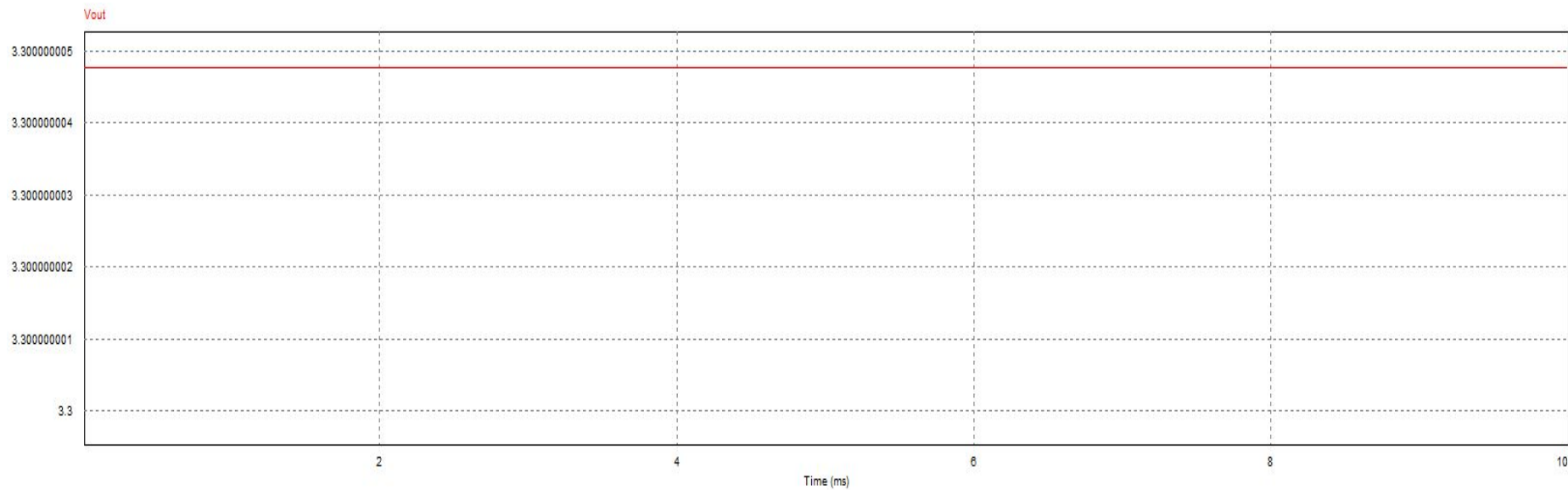




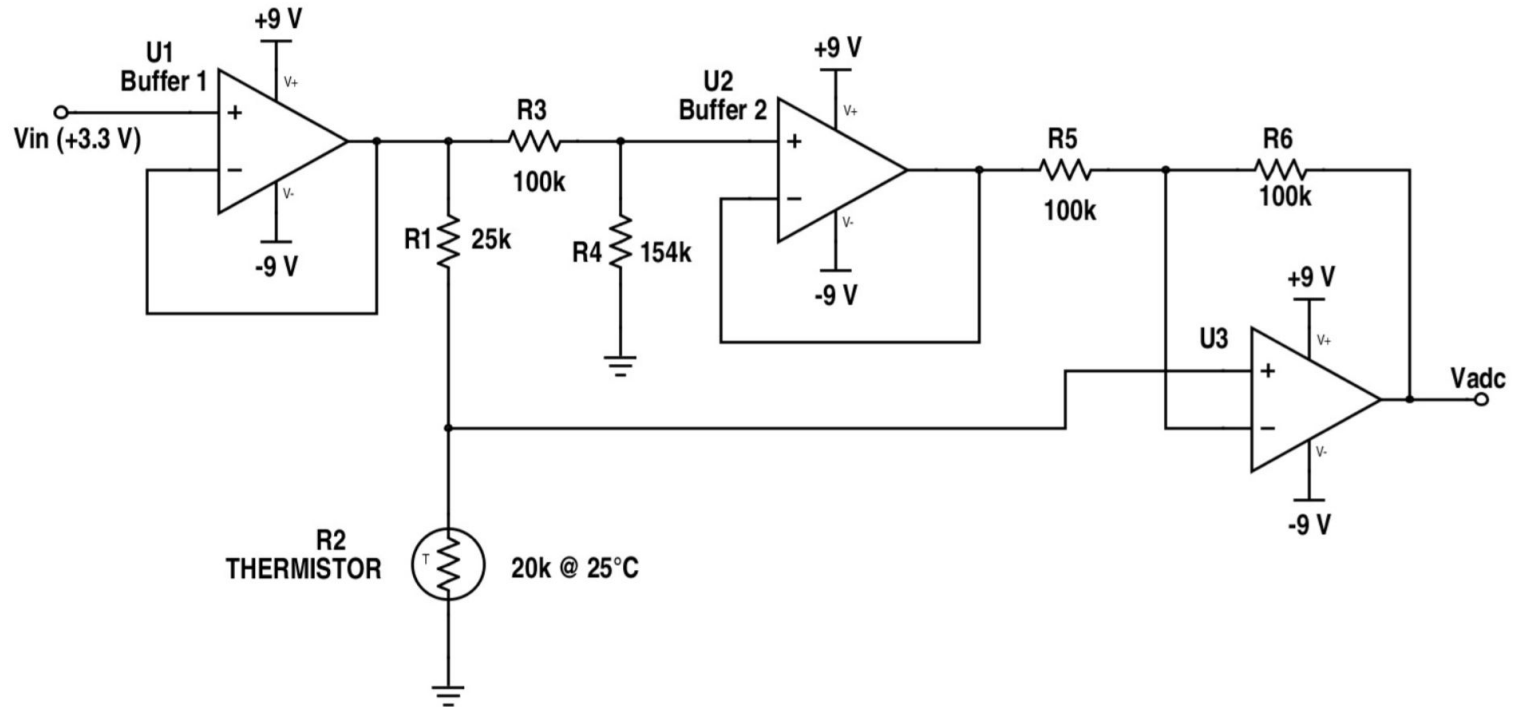
**Vin=0v**



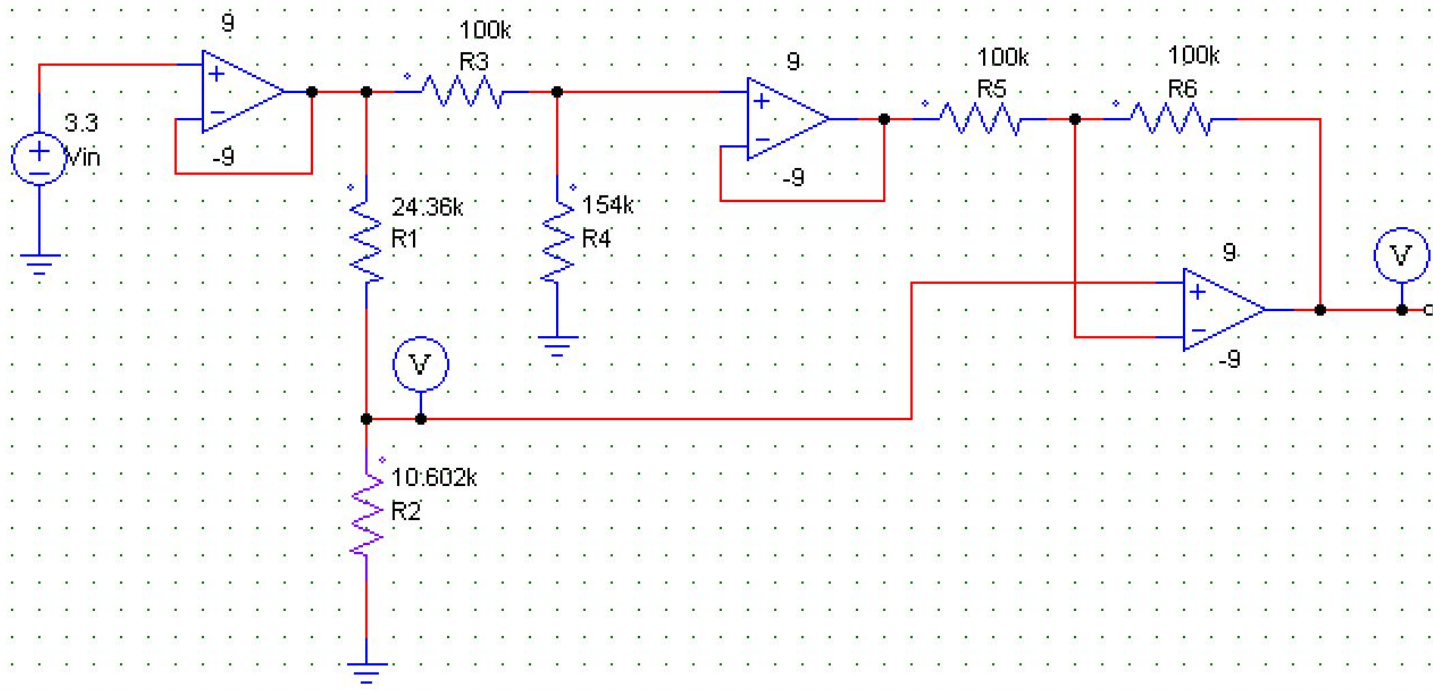
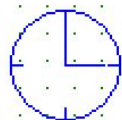
**Vin=5v**



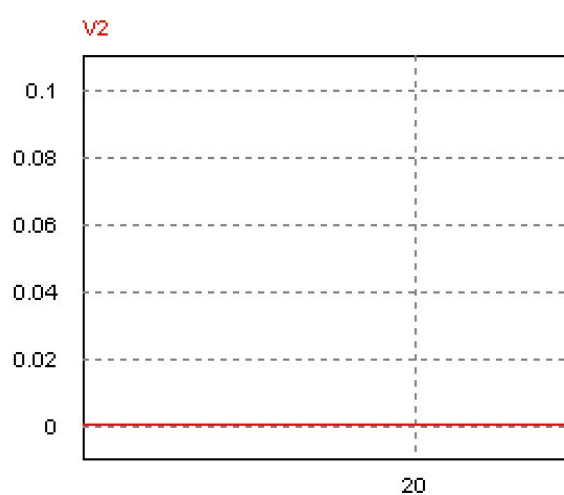
# Sensor de temperatura



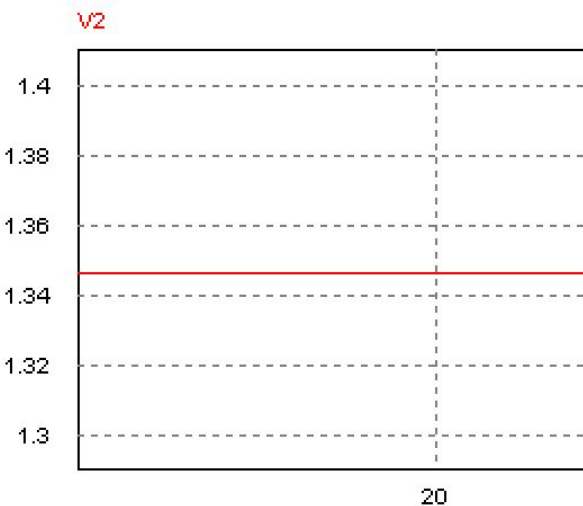




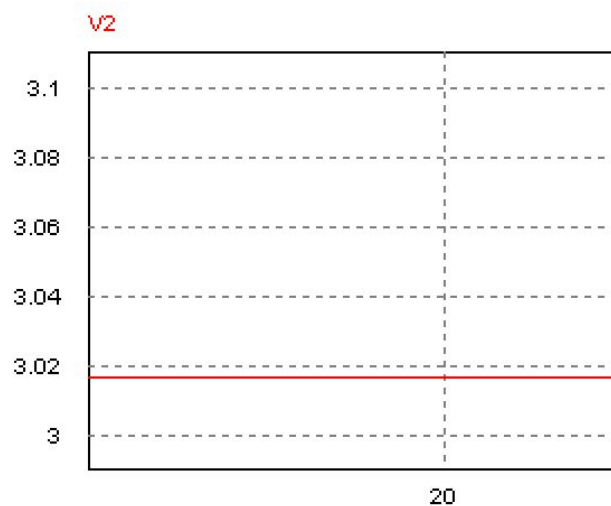
	Temperature	Thermistor Resistance
1	0 °C (min)	77.241 k $\Omega$ ( $R_{T-Min}$ )
2	20 °C	25.070 k $\Omega$ ( $R_{T0}$ )
3	40 °C	10.602 k $\Omega$ ( $R_{T-Max}$ )



R2 = 10.602 k $\Omega$

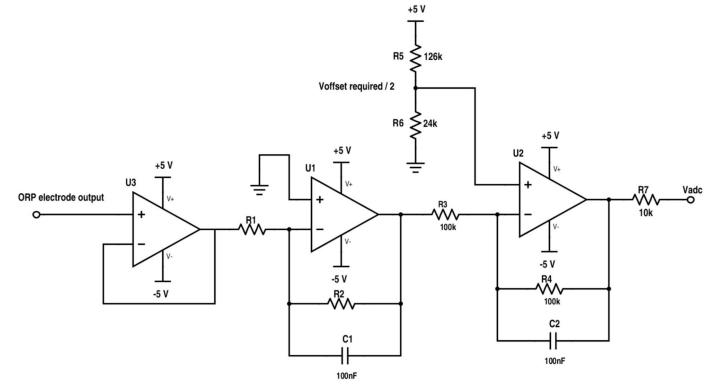
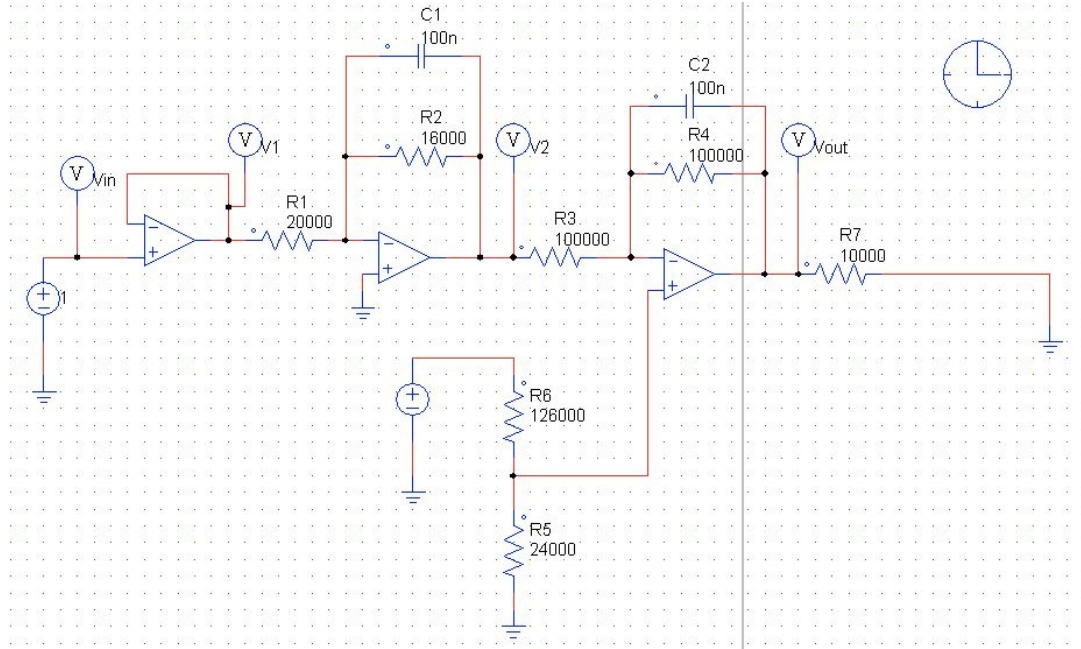


R2 = 25.07 k $\Omega$

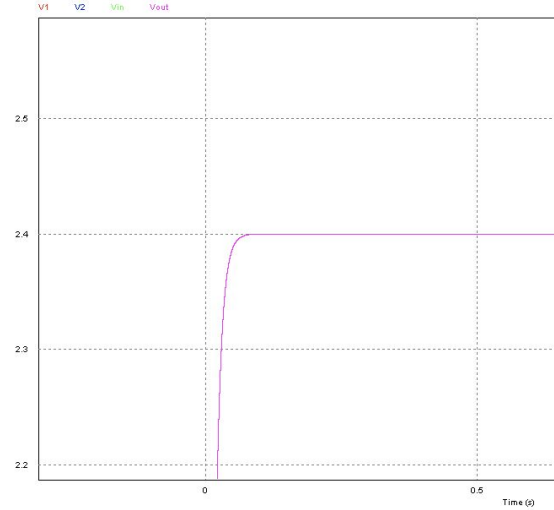
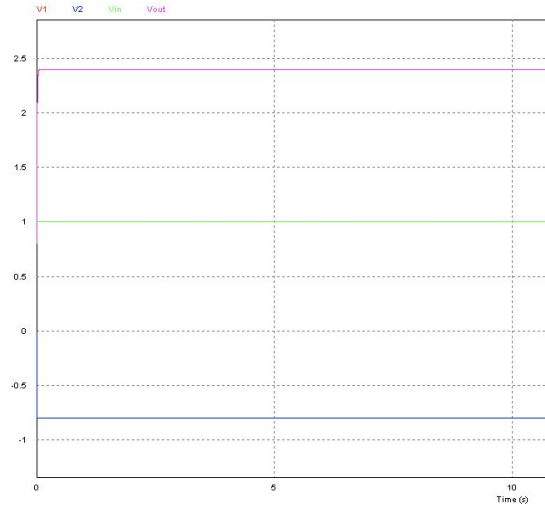
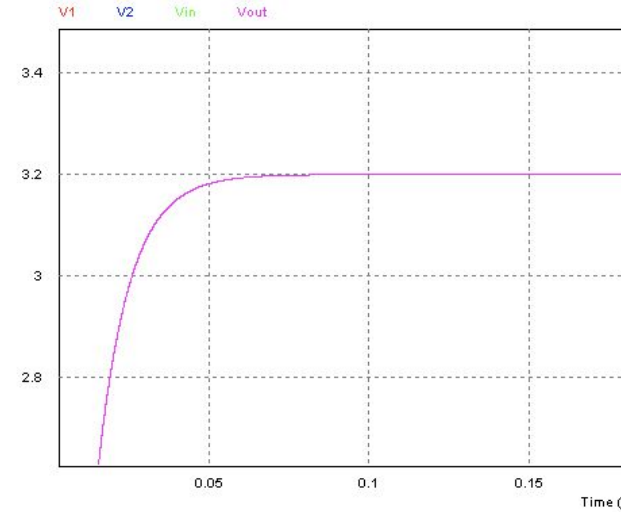
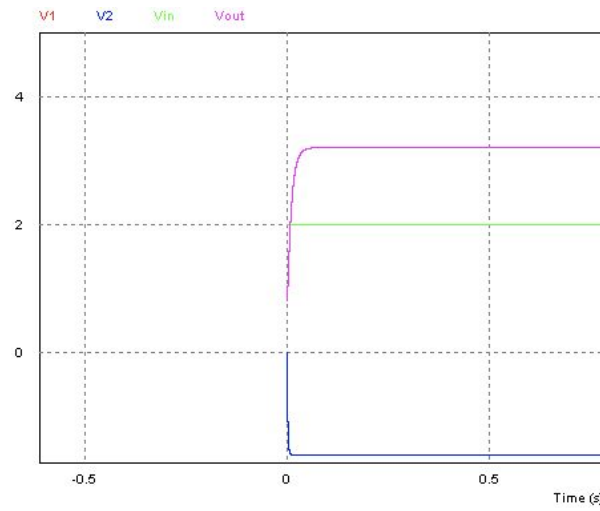


R2 = 77.241 k $\Omega$

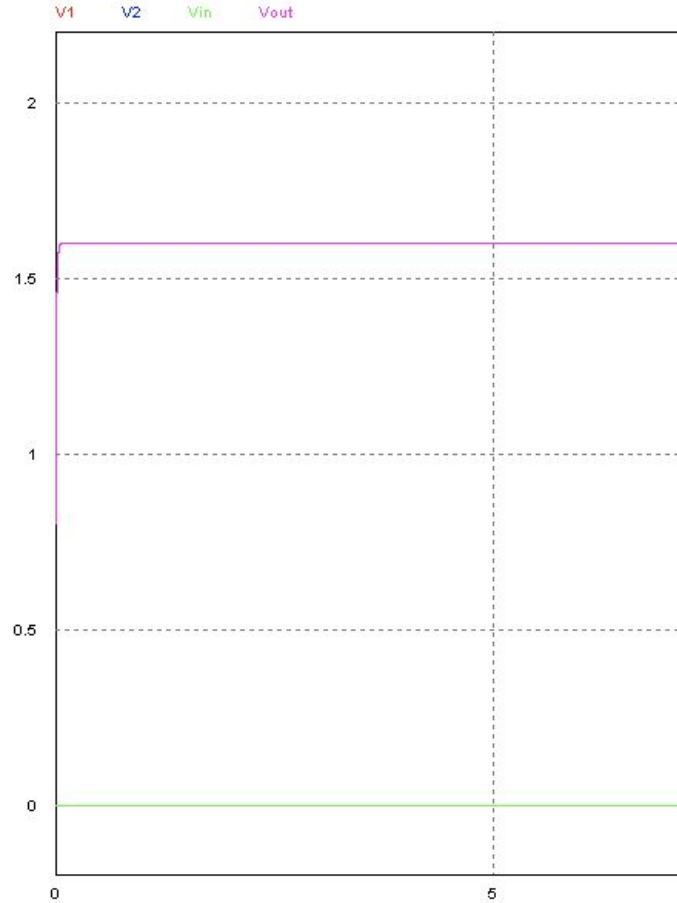
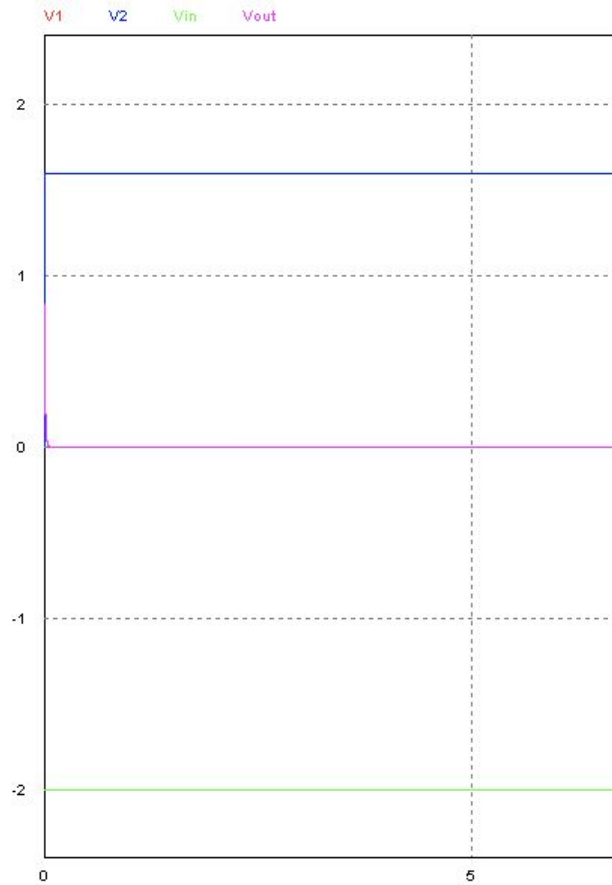
# SENSOR OXIDACIÓN REDUCCIÓN

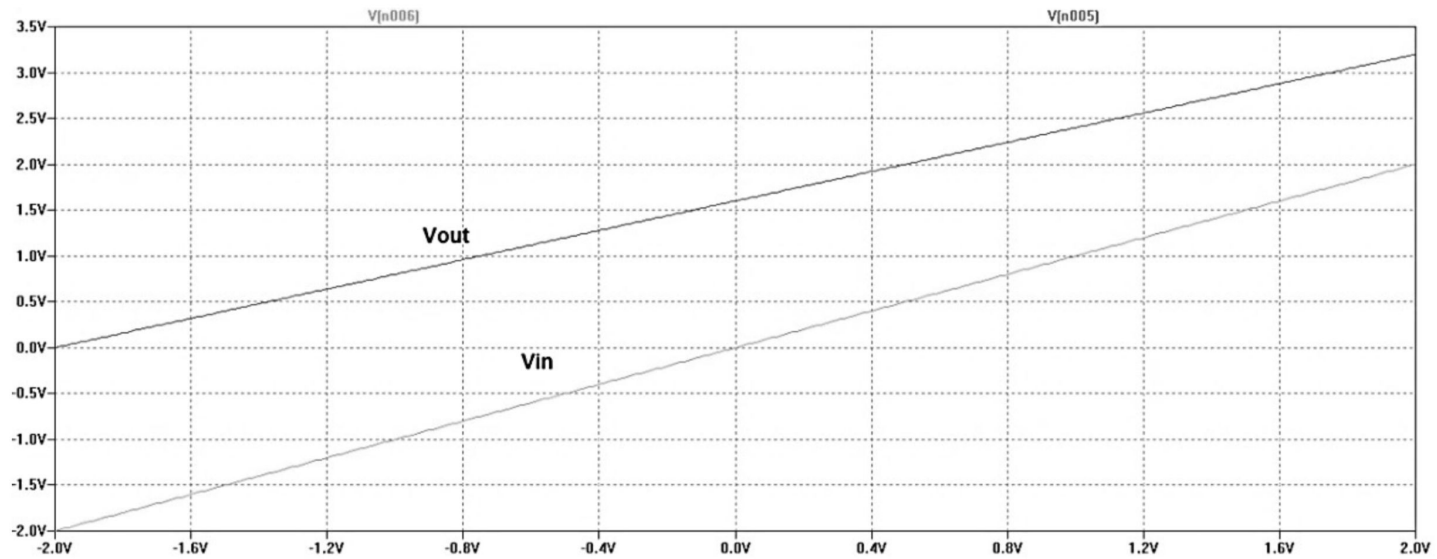
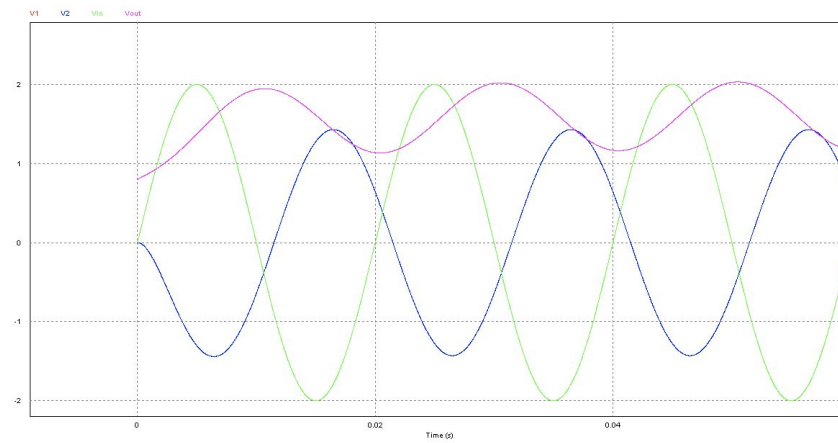


$V_{in}=2$  ,  $V_{in}=1$

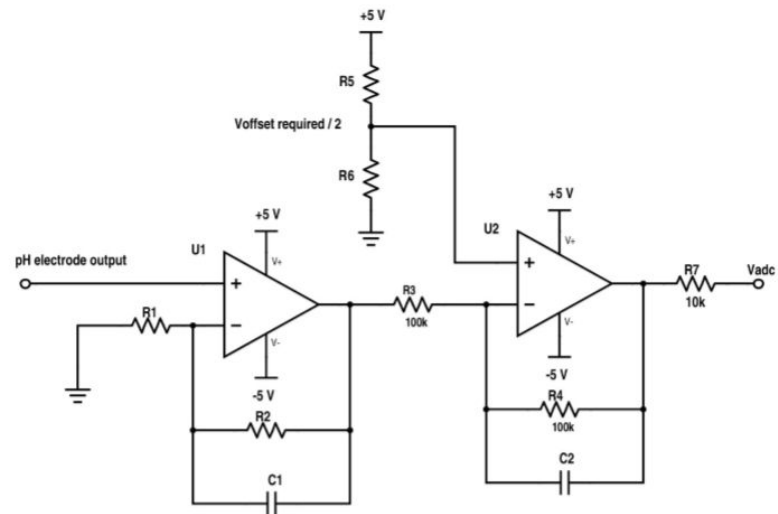
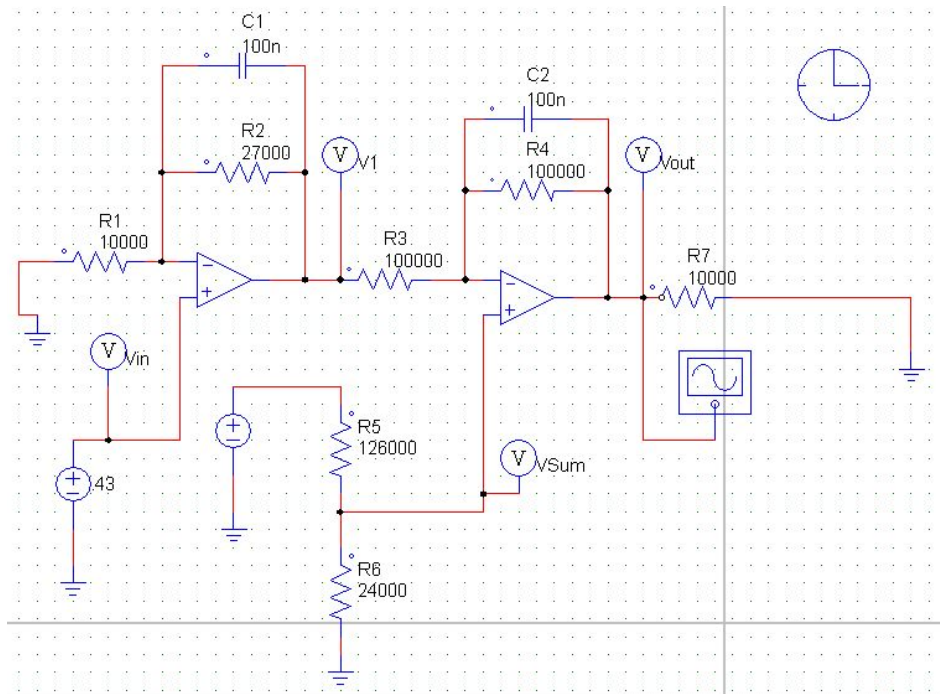


# $V_{in} = -2$ , $V_{in} = 0$

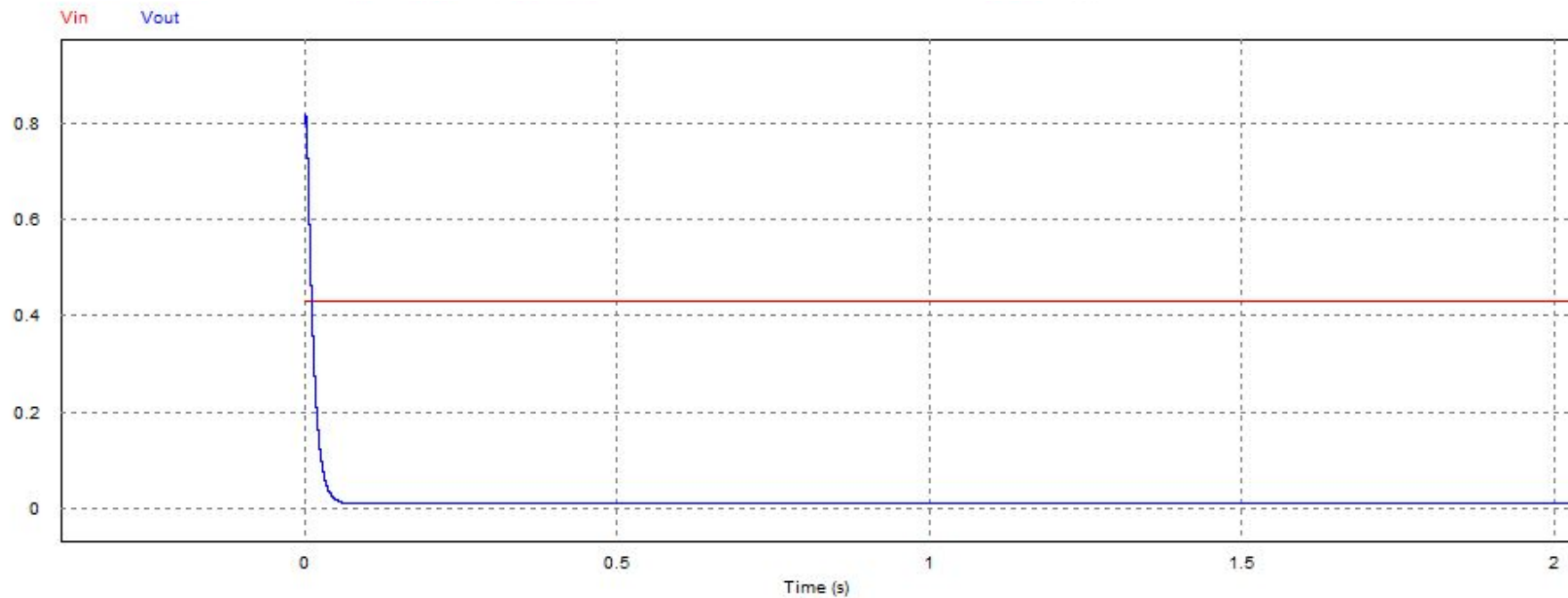




# SENSOR DE PH

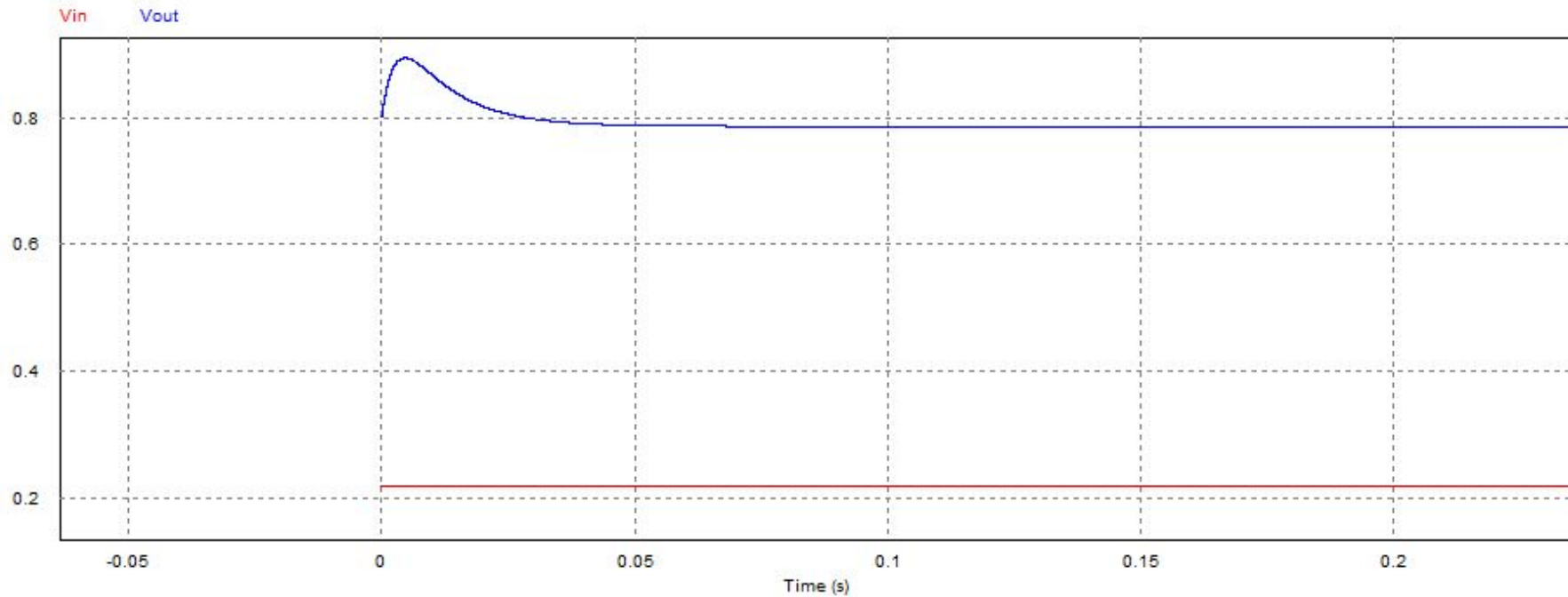


**Vin=430mV**

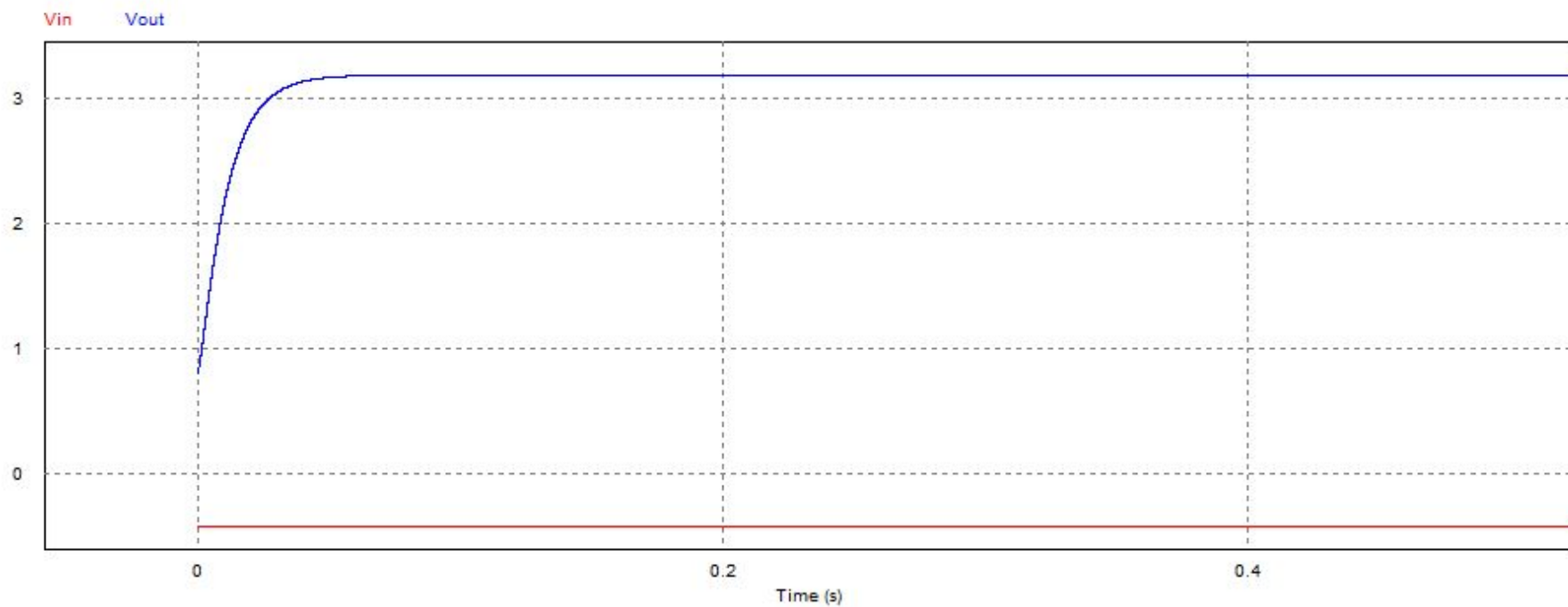




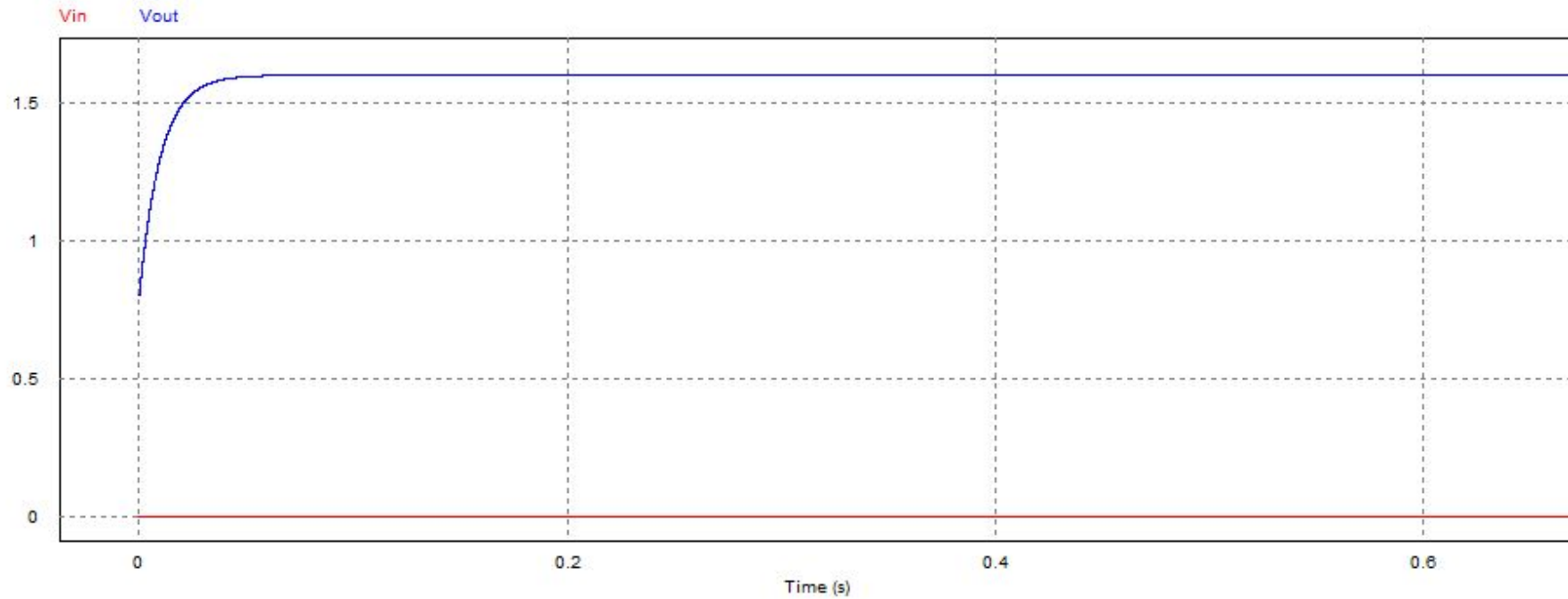
**Vin=220mV**

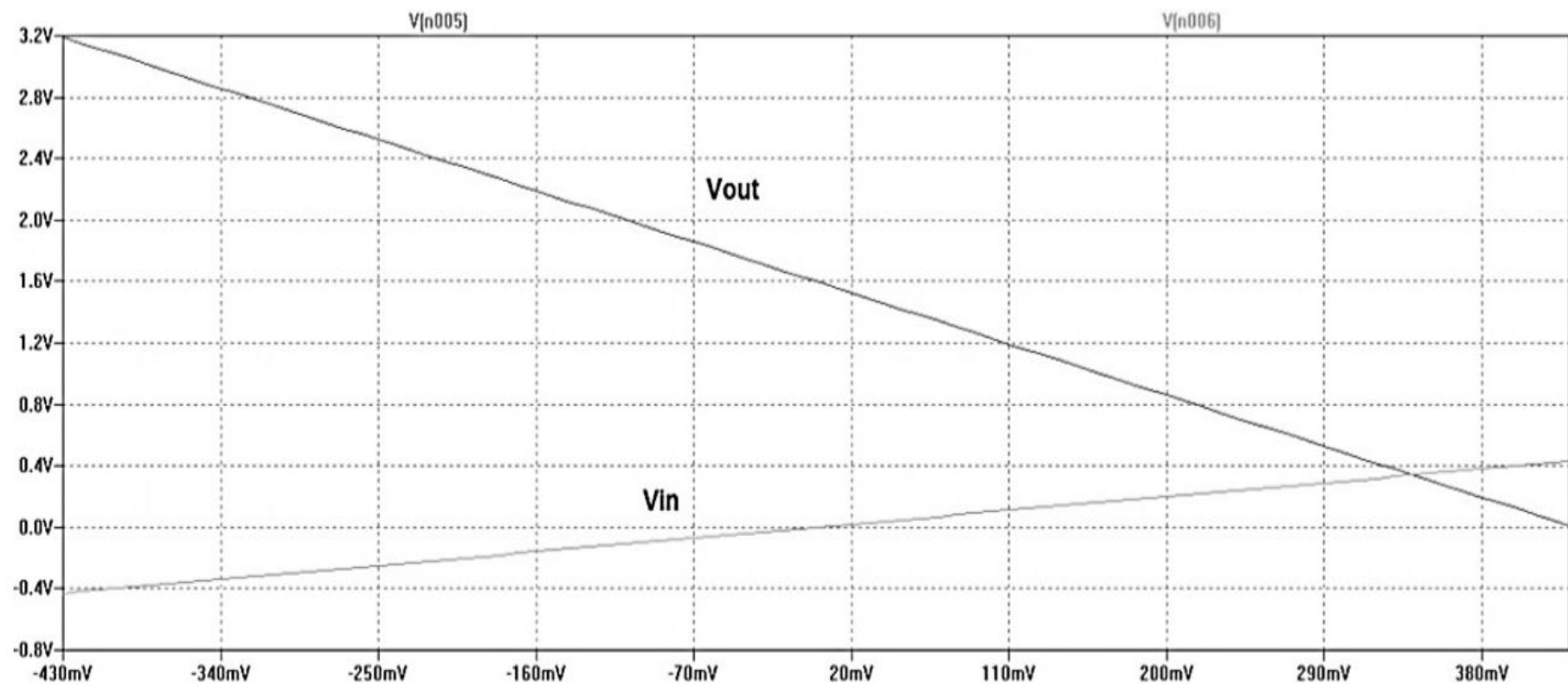


**Vin=-430mV**



**Vin=0**





**GRACIAS**

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