

Name of the college: Sadguru Gadge Maharaj College, KaradSubject: ElectronicsExpt. No. 4

Name: [REDACTED]

Class: BCS-I Batch: [REDACTED]

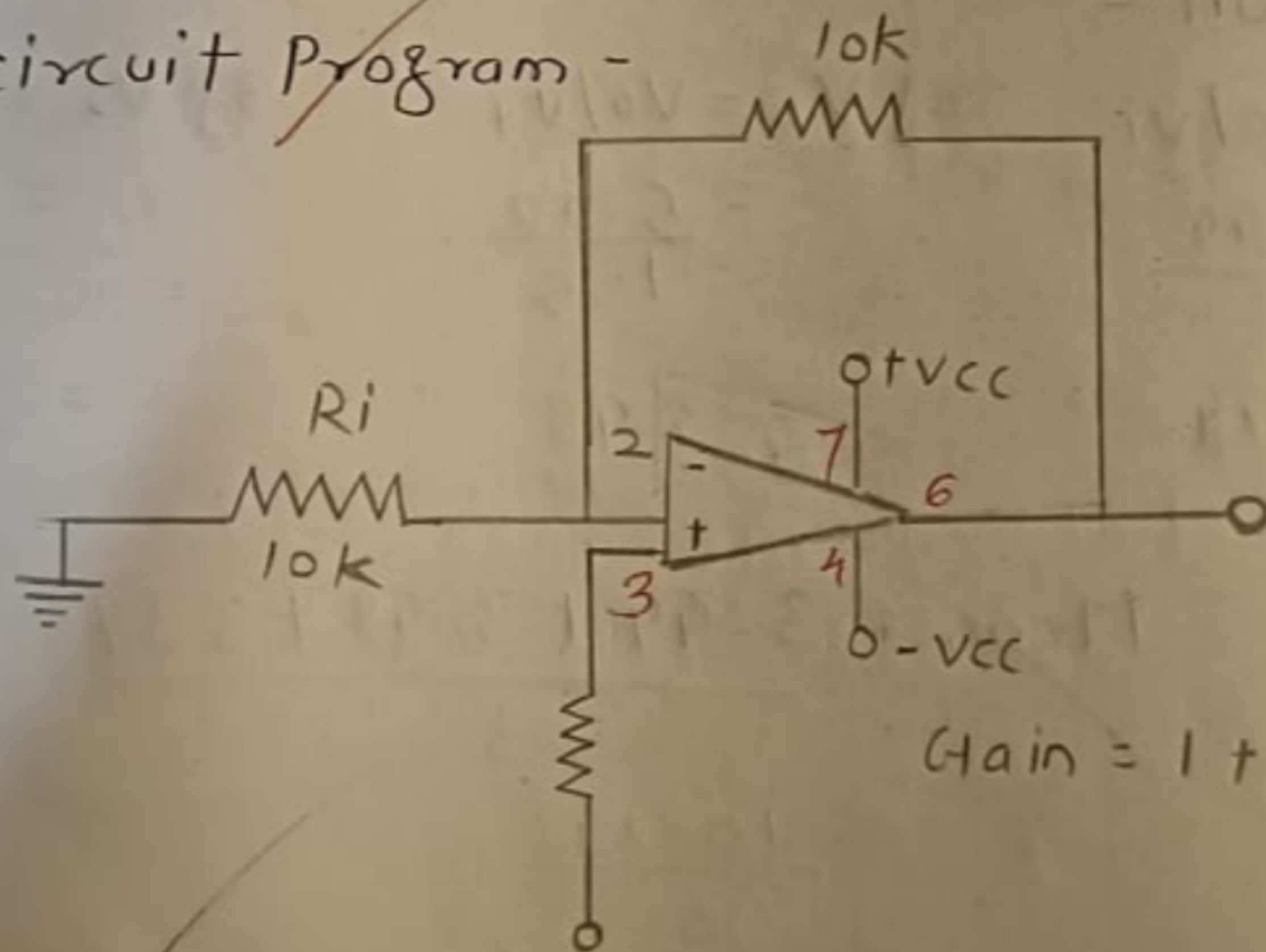
Roll No.: [REDACTED]

Date 9/10/24Title of Expt.: OP-AMP as Non-inverting Amplifier

Aim - To study OP-AMP as a non amplifier

Apparatus - OP-AMP IC 741, resistor, dual Power supply etc.

Circuit Diagram -



$$\text{Gain} = 1 + \frac{R_f}{R_i}$$

Remarks

[Signature]
Signature

observation table -

Obs No	I/P V_i	O/P V_o	Gain $= V_o/V_i$	Mean Gain
1	1	3.44	3.44	
2	1.5	5.22	3.48	3.43
3	2	6.74	3.37	

calculation -

$$\begin{aligned}
 1] V_2 &= V_o/V_i \\
 &= \frac{3.44}{1} \\
 &= 3.44
 \end{aligned}$$

$$\begin{aligned}
 2] V_2 &= V_o/V_i \\
 &= \frac{5.22}{1.5} \\
 &= 3.48
 \end{aligned}$$

$$\begin{aligned}
 3] V_2 &= V_o/V_i \\
 &= \frac{6.74}{2} \\
 &= 3.37
 \end{aligned}$$

$$\begin{aligned}
 \text{Mean} &= \frac{3.44 + 3.48 + 3.37}{3} \\
 &= \frac{10.29}{3} \\
 &= 3.43
 \end{aligned}$$

Result -

To study OP-AMP as non-inverting amplifier as 3.43