Course Name:	**Elements of Electrical and Electronics Engineering**	**Semester:**	**I/II**
Date of Performance:	**27/12/22**	**Batch No:**	**C2-2**
Faculty Name:	**Jyoti Varavedkar**	**Roll No:**	**16010122109**
Faculty Sign & Date:		**Grade/Marks:**	**/ 25**

Experiment No: 10

Title: Inverting and Non-inverting amplifier using OPAMP

Aim and Objective of the Experiment:

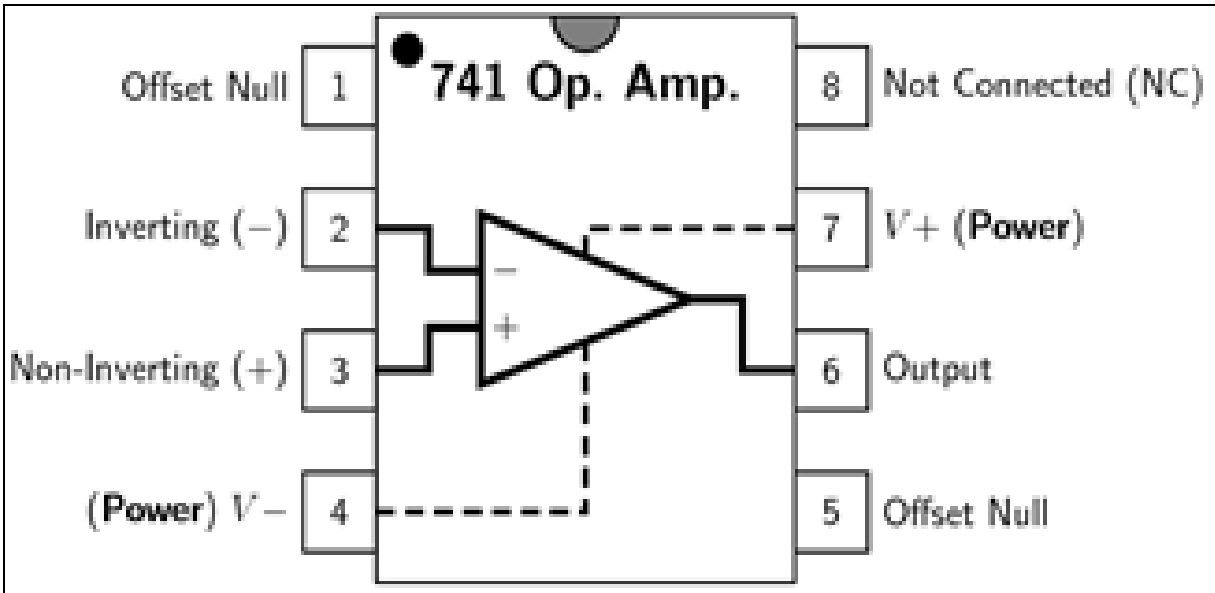
- To understand inverting configuration of OPAMP
- To understand Non-inverting configuration of OPAMP
- the concept of negative feedback and closed loop configuration of OPAMP.
- To understand gain of inverting and non-inverting OPAMP

COs to be achieved:

CO5: Understand operational amplifier and its applications

Circuit Diagram/ Block Diagram:

Pin diagram of IC 741



Procedure

1. Click on following link for Virtual lab experiment.

   http://vlabs.iitkgp.ac.in/be/exp17/index.html#

2. Go through the theory, solve pre-quiz.
3. Go to simulation and perform the experiment by following the given procedure.
4. Prepare observation table, plot the graph based on observations.
5. Write conclusion based on observations.

Observations:

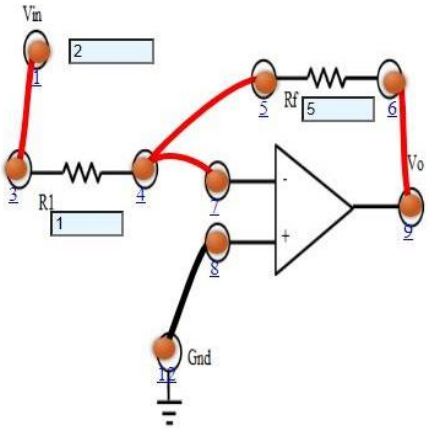
INSTRUCTION

EXPERIMENTAL TABLE

Resistance: 1 KΩ

Serial No.	Input Voltage V	Output Voltage V	Current mA
1	1	-5.00	0.400
2	2	-10.0	0.800

Inverting Opamp

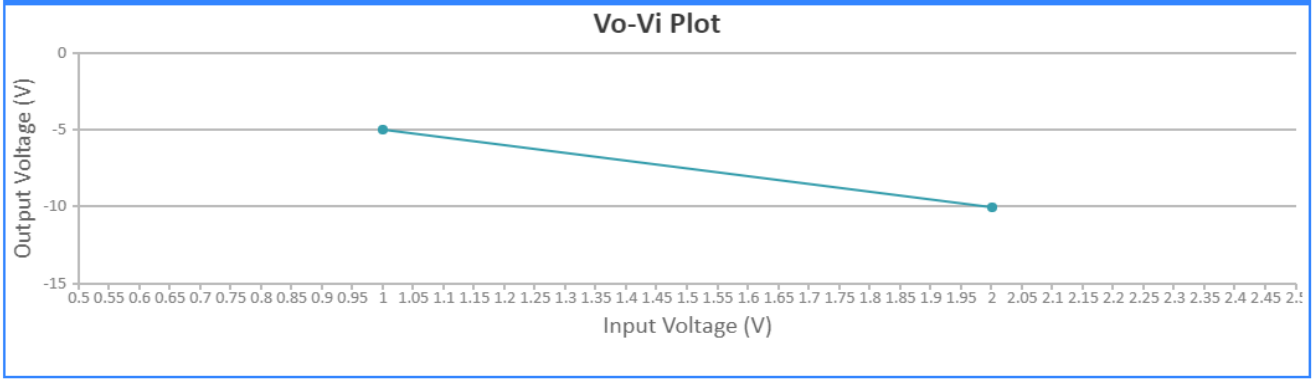


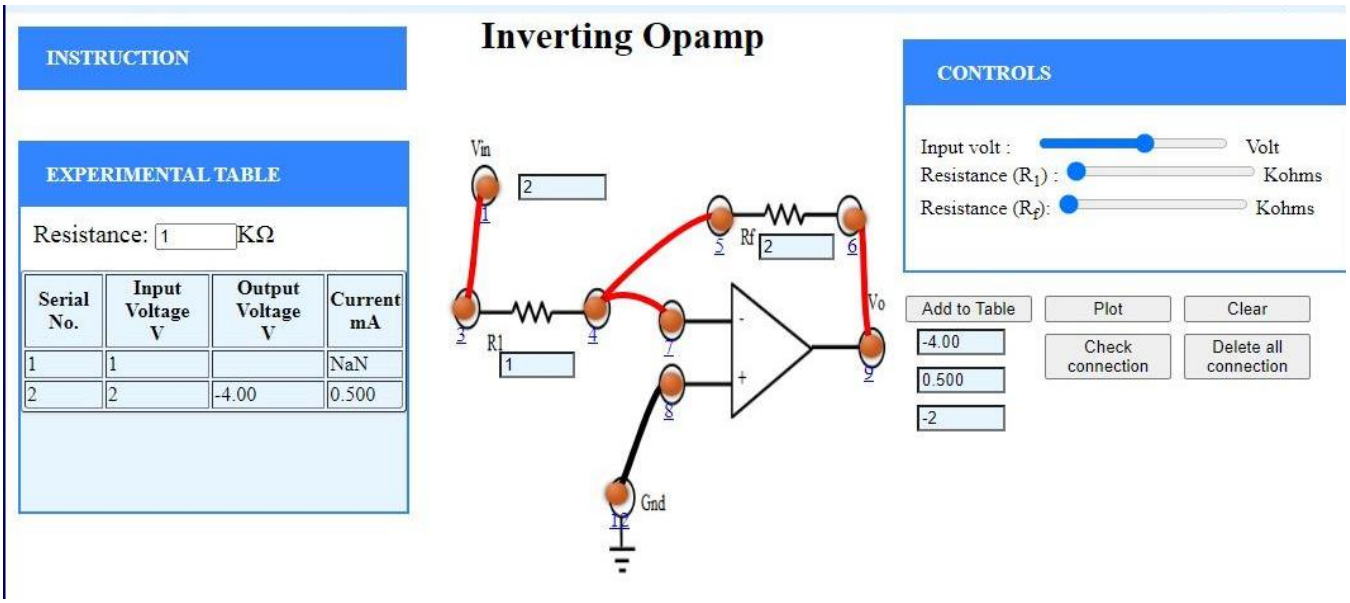
CONTROLS

Input volt : Volt
Resistance (R_1) : Kohms
Resistance (R_f): Kohms

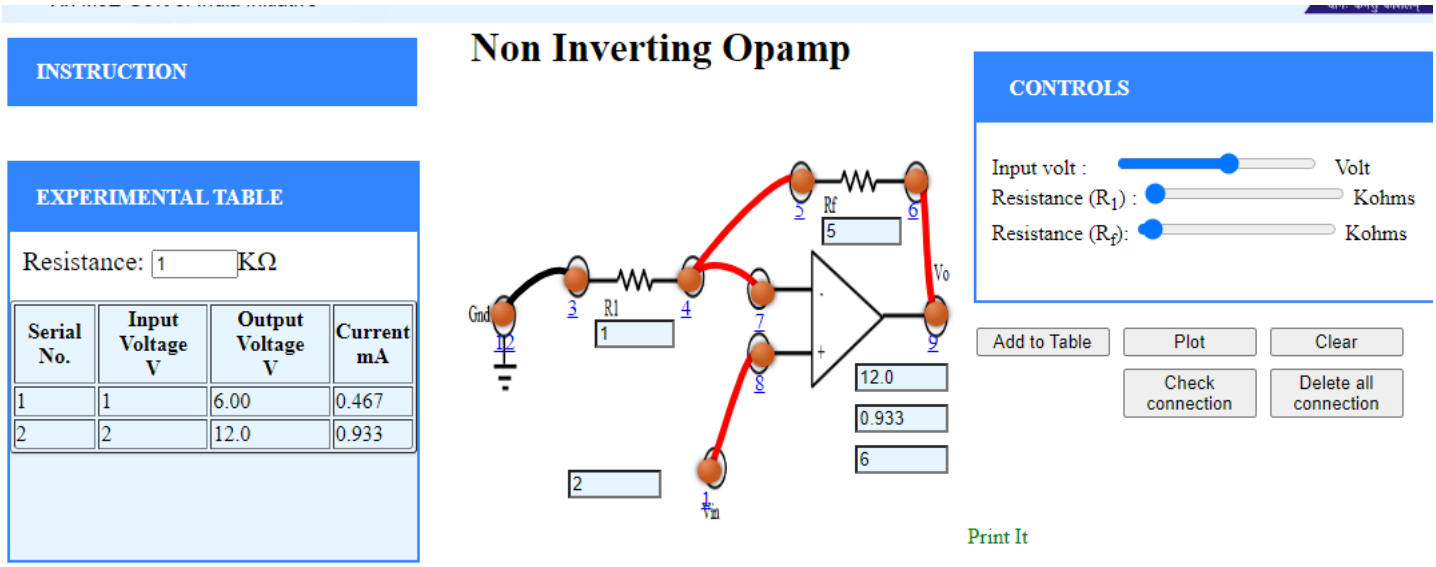
Add to Table | Plot | Clear
-10.0 | Check connection | Delete all connection
0.800
-5

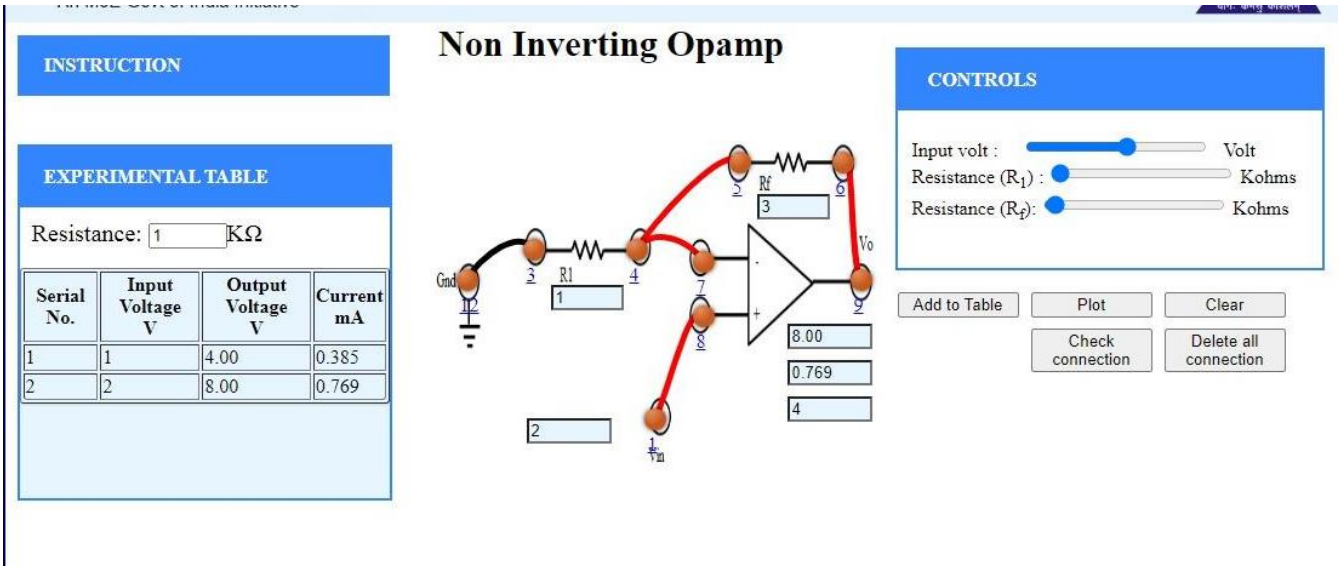
GRAPH PLOT

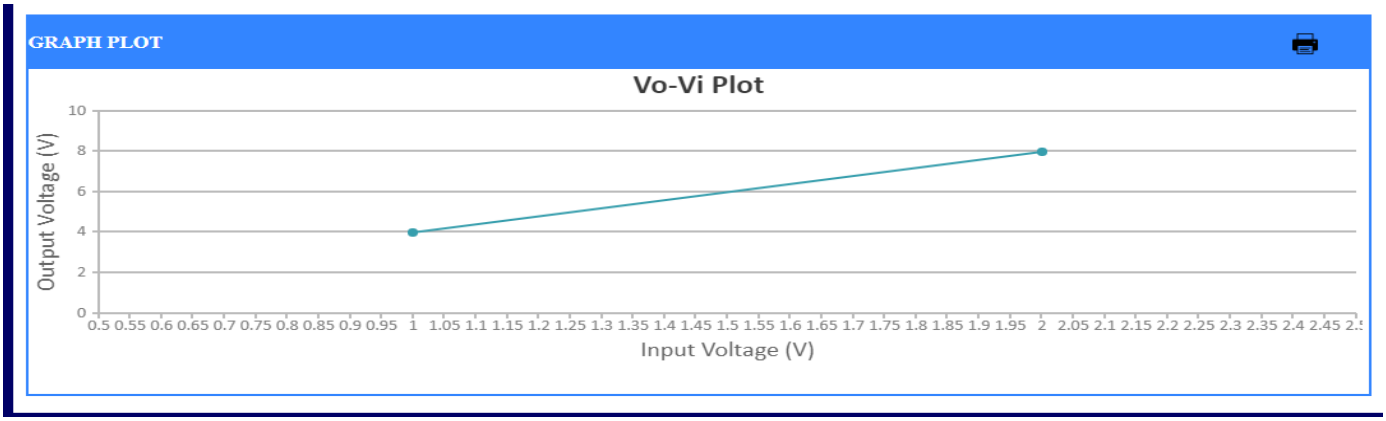




NON - INVERTING :







Conclusion:

Thus, we learnt the working of OPAMP in inverting and non-inverting configuration.

Signature of faculty in-charge with Date: