

Indian Institute of Technology, Indore
Computer Science & Engineering
CS 354N: Assignment IV - ANN
Date- 28-01-2025

Some general instructions:

- Name your file in "Assignment4_yourRollno.pdf" format.
- You are not allowed to use in-built libraries related to the topic. Code everything from scratch.
- Submission of the assignment should be made using the Google Classroom platform only.
- Plagiarism in any form will not be tolerated.
- You are allowed to submit only one before the deadline. Avoid multiple submissions. In such a case, only the last submitted file will be used for evaluation.
- Last date for submission of the assignment: **02-02-2025**
- Submit a single file (report) containing the procedure (screenshot of main procedures/code/Results).

- 1. Implement single node MP Neuron model using C/C++ to display the net output.**
- 2. Implement AND gate using MP Neuron model with threshold constraint. (Iteration or recursion may be applied to reach the threshold)**
- 3. Implement NAND gate using MP Neuron model with threshold constraint. (Iteration or recursion may be applied to reach the threshold)**
- 4. Implement OR gate using MP Neuron model with threshold constraint. (Iteration or recursion may be applied to reach the threshold)**
- 5. Implement NOR gate using MP Neuron model with threshold constraint. (Iteration or recursion may be applied to reach the threshold)**

Note: All the programs must be user-friendly and user-interactive.

To make your model scalable for large input(ex. 50) you are advised to use files