

DA 312, ADVANCED MACHINE LEARNING LABORATORY  
LAB 2 (SPRING 2025)

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<b>Instructor:</b>	Dr. Chiranjib Sur	<b>Time:</b>	Wednesday - 9:00-11:00 (MDSAI Lab)
<b>Email:</b>	<a href="mailto:chiranjib@iitg.ac.in">chiranjib@iitg.ac.in</a>	<b>Place:</b>	MDSAI Lab.

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**Problem 1: [20+40+40 marks]**

**Example Code with Dataset**

**Dataset:** Heart Disease Prediction

- Task: Predict whether a patient has heart disease.
- Dataset URL: UCI Machine Learning Repository
- Framework: TensorFlow/Keras [https://colab.research.google.com/drive/113YdcI\\_D10HvzaaRETix2GcW0usp=sharing](https://colab.research.google.com/drive/113YdcI_D10HvzaaRETix2GcW0usp=sharing)
- Run this code

**Dataset 1: Banknote Authentication**

- Description: Predict whether a banknote is authentic or forged.
- Dataset URL: [https://archive.ics.uci.edu/ml/machine-learning-databases/00267/data\\_banknote\\_authentication.txt](https://archive.ics.uci.edu/ml/machine-learning-databases/00267/data_banknote_authentication.txt)
- Modify the above code for this dataset.

**Dataset 2: Titanic Survival Prediction**

- Description: Predict whether a passenger survived or not.
- Dataset URL: <https://raw.githubusercontent.com/datasciencedojo/datasets/master/titanic.csv>
- Modify the above code for this dataset.