**Department of Software Engineering**

**CS471: Machine Learning**

**Class: BESE-12AB**

**Lab 10: Open Ended Lab**

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# Lab 10: Open Ended Lab

**Introduction:**

In this lab, your objective is to build a machine learning model using the UCI adult income dataset to predict whether an individual earns more than $50,000 per year. You have the freedom to choose your tools and techniques to achieve this goal.

**Objective:**

Develop an ML model with best performance scores.

**Tools:**

Google colab or equivalent environment

**Lab Task:**

Develop a machine learning model on the UCI adult income dataset available at <https://archive.ics.uci.edu/dataset/2/adult> by following proper machine learning pipeline. The end goal is to develop a model that successfully classify the income and achieves the best performance on the data. The choice of the algorithm and the pipeline steps should be logical and must be supported with logical explanation and proper headings. Compare your results with at least 3-5 other techniques and analyze the results obtained.

**Deliverable:**

A Jupiter notebook with code and analysis on the results