

## Assignment A-1

### Task-1: Mushroom Classification. (10 marks)

Implement a Naïve Bayes classifier for the Mushroom classification. Check out the enclosed metadata. Divide the dataset into training and testing sets with 80% and 20% randomly selected records (without replacement) respectively. Make sure to keep the classes balanced. Plot the confusion matrix and report the performance in precision, recall, and F-1 scores.

### Task-2: Sentiment Classification. (10 marks)

Implement a Naïve Bayes classifier for the movie reviews classification problem. Divide the dataset into train-test sets with 70%-30% randomly selected records (without replacement) respectively. Make sure to keep the classes balanced. Plot the confusion matrix and report the performance in precision, recall, and F-1 scores.

Submission notes:

1. Submit your code along with the results in a pdf file through the Google Classroom.
2. The due date is September 29, 2025.

Assessment:

1. Viva voce will be conducted within the week of submission.
2. All assignments carry equal weight towards the allocated total marks for the activity.