

# CSM-322: Information and Coding Theory

## Lab - 2

(Odd Semester 2024-25)

August 16, 2024

### Q1. Huffman Codes

Given an array of alphabets and their frequency. Write a program to print Huffman encoding for all the given alphabets.

Example: {A: 12, B: 5}

Output: {A = '1', B = '0'} or {A: '0', B: '1'}

Example: {S1: 0.3, S2: 0.2, S3: 0.2, S4: 0.2, S5: 0.1}

Output: {'S4': '00', 'S2': '01', 'S1': '10', 'S5': '110', 'S3': '111'}