

# Line Coding Assignment

Data Communication

November 19, 2022

## 1 Introduction

Implemented Line coding encoder and scrambler with digital data generator.

- Digital data generator: generated completely random data sequence.
- Line coding schemes implemented: NRZ-L, NRZ-I, Manchester, Differential Manchester, AMI.
- Scrambling schemes: B8ZS, HDB3.

## 2 Language and Libraries Used

- Language Python 3
- Libraries
  - Matplotlib
  - Sys
  - NumPy
  - Random

## 3 Result

Digital data stream given, longest palindrome in that data stream, digital signal produced and in case of scrambling, scrambled signal produced.

## 4 Team Members

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