



National Institute of Technology (NIT), Srinagar

Department of Information Technology

Line Coding Assignment Report

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Language Used

- C++ 17

Libraries Used

- Sciplot
- Gnuplot

Assumptions

- All schemes are implemented using positive logic.
- Manchester encoding uses IEEE (802.3) convention.
- It is assumed that user will give binary data to the encoder.

Setup

- Install gnuplot

```
• sudo apt update  
• sudo apt install gnuplot-x11
```

- Install sciplot

```
• git clone https://github.com/sciplot/sciplot --recursive  
• cd sciplot  
• mkdir build && cd build  
• cmake ..  
• sudo cmake --build . --target install
```

- Install adwaita theme (For WSL only)

```
• sudo apt install adwaita-icon-theme-full
```

Usage

```
• g++ -std=c++17 main.cpp -o main.out  
• ./main.out
```