CO250
Data Communication

Assignment 1 Report

Team Members

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Question : B3

Given a stream of data bits (this is the input), you are required to produce a Polar RZ Signal. Further convert it into Bipolar Pseudoternary. Record your observations and obtain the differences between the two schemes in terms of bit rate, baud rate, bandwidth, value of r. Also, you are required to vary the above mentioned parameters and record the results (for eg. increase the bit rate and observe how the waveform changes). Plot graphs to substantiate your recorded observations.

Link to the repository :
https://10.100.13.215/16CO104/16CO104-115-Data-Communication-CO250

Note : The above repository is private.
The following have access to the repository (GitLab Handles):

1. 16CO104
2. 16CO115
3. brcnitk

How to execute the code:

1. Open main.m in MATLAB (keeping the other files intact in the same folder).
2. Click on the ‘Run’ button.
3. Enter valid input as prompted on the command window.
4. A graph of the waveform will pop up, open it in full screen mode, to view better.

Screenshots:

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Command Window
New to MATLAB? See resources for Getting Started.

        Academic License

>> main
Enter number of bits : 7
Enter the bits (within single quotes ('')) : '1011100'

Choose a parameter
1. Bit Rate
2. Baud Rate
3. Bandwidth
Enter your choice : 1

Enter the bit rate : 2.5
```