



## Line coding encoder and scrambler

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### 1 Introduction

- **Objective:** Implementing Line coding encoder and scrambler with digital data generator.
- Generates completely random data sequence and a random sequence with some fixed sub-sequences like eight or four consecutive zeros.
- Line coding schemes implemented: NRZ-L, NRZ-I, Manchester, Differential Manchester, AMI.
- Scrambling schemes: B8ZS, HDB3.
- Language used: JAVA-8
- IDE used: Eclipse-workspace

### 2 Assumptions used

1. All schemes are implemented using Positive Logic.
2. Manchester encoding uses IEEE(802.3) convention.
3. It is assumed that the user will give Binary Data to the encoder.

### 3 Prerequisite

JAR files installed into the IDE and imported into an external library.

**REFERENCES:** [https://www.tutorialspoint.com/jogl/jogl\\_canvas\\_with\\_swt.htm](https://www.tutorialspoint.com/jogl/jogl_canvas_with_swt.htm)

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