## **Description of the Script**

- 1. **Parameter Definition**: The clock frequency and baud rate are defined, along with the number of data bits.
- 2. **Function transmit\_rs232**: This function takes the data to be transmitted and a start signal. If the start signal is true, it creates a buffer tx\_shift that includes the start bit, data bits, and a stop bit.
- 3. **Signal Generation**: Each bit is expanded based on the transmission period, and a transmission signal is returned.
- 4. **Visualization**: Matplotlib is used to plot the transmission signal, showing how the voltage level changes over time.

## **Additional Considerations**

- This script does not include the "busy" state logic or error management, which are features of the original VHDL design. If necessary, these features could be added by using additional variables and conditions in the Python code.
- Qiskit is primarily used for developing quantum algorithms and is not suitable for implementing classic systems like RS232. Therefore, the focus is more on using NumPy and SciPy for data manipulation and signal analysis.