

## Lab5 - Exercise

### 1. Implement a Socket Program for Data Transmission with Odd Parity

**Objective:** Develop a client-server application using TCP socket programming, where:

- a. **Sender Process (Client):** Converts a given binary dataword into a codeword by adding an odd parity bit and transmits it to the receiver
- b. **Receiver Process (Server):** Receives the codeword, checks for errors using odd parity, and extracts the original dataword.
- c. **If the Receiver Process extracts the original dataword, then +VE ack is sent to Sender Process.**

### 2. Task: Implement a Socket Program for Data Transmission with Checksum Verification

**Objective:** Develop a client-server application using socket programming, where:

- a) **Sender Process (Client):** Computes a checksum for a given dataword and transmits both the dataword and checksum to the receiver.
- b) **Receiver Process (Server):** Computes the checksum upon receiving the data and verifies its correctness.