

NETWORK PROGRAMMING

1. Develop a socket-based client-server communication system utilizing TCP for network communication where the client sends a message to the server and the server displays it
2. Develop a socket-based client-server communication system utilizing UDP for network communication where the client sends a message to the server and the server displays it.
3. Develop a socket-based client-server communication system utilizing TCP for network communication where the client sends a number to the server and the server checks if the received number is even or odd.
4. Develop a socket-based client-server communication system utilizing UDP for network communication where the client sends a number to the server and the server checks if the received number is even or odd.
5. Develop a socket-based client-server communication system utilizing TCP for network communication where the client sends a string to the server and the server checks if the received string is palindrome or not.
6. Develop a socket-based client-server communication system utilizing UDP for network communication where the client sends a string to the server and the server checks if the received string is palindrome or not.
7. Develop a socket-based client-server communication system utilizing TCP for network communication to enable the `SO_REUSEADDR` option to reuse the local address.
8. Develop a socket-based client-server communication system utilizing TCP for network communication to enable the `SO_KEEPALIVE` option to detect if the connection is still alive.