

**Q. Write a Java program to implement TCP communication between a client and a server.**

- The client should send a message to the server.
- The server should receive the message and reply back with a response.
- Both messages should be printed on the respective consoles.

**Q. Write a Java program to implement UDP communication between a client and a server.**

- The client should send a message to the server.
- The server should receive the message and reply back with a response.
- Both messages should be printed on the respective consoles.

**Q. Write a Java program to parse and display the components of a URL. The program should print the protocol, host, port, path, query, and fragment (reference) of a given URL string.**

**Q. Write a Java program to read and display the contents of a web page using the URL class. The program should open a connection to a specified URL and print the HTML source code line by line.**

**Q. Write a Java program to send an email using SMTP. Your program should:**

- Connect to an SMTP server (e.g., Gmail SMTP).
- Authenticate using valid credentials. (Need app password)
- Send an email with a subject and message body to a specified recipient.