Design

Client

1.The client is running on port 1111
2. The client initializes the address of the server and its own address
3.The client binds to port 1111
4.now it runs a command line
5. when there is a statement in the format nslookup <string>
6. It forwards the request to the server
7.when there is a reply it prints on the screen and waits for the next command

Server

1.The server is running on port 1234
2.The server initializes the address of the server, client, tldserver
3.The server binds to port 1234
4.The server receives a command bit
5.when the command bit is received it receives the hostname
6.It checks the content of the file named DNS and if a match is found it returns to the client
7.If no match is found it sends a command bit and the hostname to the tldserver
8.when a response is received it checks if its a error message
9.If the message is an error message it forwards the message to the client
10.If not it copies the content to the file DNS and then forwards the ip addresses

TLDserver

1.The server is running on port 1122
2.The server initializes the address of the server tldserver
3.The server binds to port 1122
4.The server receives a command bit
5.when the command bit is received it receives the hostname
6.It checks the content of the file named DNS and if a match is found it returns to the client
7.If no match is found it sends a error message as “not found”
8.If there is a match it sends the ip of the host to the server