Knock-knock SKJ project

done by s20962

What implemented:

- Multi-threaded UDP Server, which handles sequence of packets and gives corresponding response to client. If specific request has been sent, then server opens TCP Server and sends port number to user.
- TCP Server is just a simple implementation of request-response system, after getting a request, it sends a response to Client.
- Client works on both UDP and TCP packets, receive and send them, communicate with servers.

Difficulties:

- Making server working on multiple ports at once (basically, multithreading)
- Making client working at one time with TCP and UDP packets

Errors:

- Haven’t been found

Implemented protocols:

- Basically, client and server communicate both by using UDP. Firstly, creates instance of class UDPClient, which sends UDP packet to assigned ip and port, if it gets no reply from server in a given timeout, then it moves to next port. If it gets reply from server, then it sends the second packet to get a reply with port to TCP server, with which it communicates later. In the end, it terminates it self.