Let's chat

Consider a classical chat system, in which participants can exchange small text messages (ex. MSN/Yahoo/Google Messengers).
The system consists of two parts: a server and a set of clients. The server provides the basic login/logout functionality and maintains a list of the active clients. The clients connect to the server, query the status of other clients (ex. friends), retrieve a reference to them (ex. handle, ip address, etc.). and then communicate directly one with the other.

Requirements: Implement the chat system in Java/.NET. Pay attention that on the display of client the messages from other clients must be in chronological order. If the delay of a message from a client is higher than a certain limit, or the message was lost, the client will be informed about the problem and the message will be resent.

Hints: the server may provide a time service (derived from Assignment 3).

Theory - Bus scheduling for TDL modules

Fill in the missing values from the tables of the following example: BusScheduleCaseStudy.