In this assignment, you are asked to create a simple time server that takes a time request from a client using "telnet" console command on a Linux machine. Similar to our lab classes on socket communication, you will create a server that takes date request from a client and send the correct date data that is requested.

To learn more about date formats, you should read the man pages of "date" console command that is available via console command "man date" or at the following website (https://man7.org/linux/man-pages/man1/date.1.html). Your server will basically receive date requests, use "date" command to get correct output and send this output to the client. Examples of this operation are given below (assume the current time and date was 01:23:45 – Saturday – 01/01/2022).

CLIENT'S DATE REQUEST	SERVER'S RESPONSE
GET_DATE %H:%M:%S	01:23:45
GET_DATE	INCORRECT REQUEST
GET_DATE %E (Capital E as an option does not exist)	INCORRECT REQUEST
GET_DATE %Y/%m/%d - %H:%M:%S	2022/01/01 - 01:23:45

You should be able to work with every option that is given in manual page of "date" console command. The basic function of your time server would be getting date format for "date" console command and returning the output to the client. However, if the given date format is not correct (contains incorrect or unavailable options for "date" console command) just send "INCORRECT REQUEST" to the client without needing any explanation of this reply.

Only one connection (one client) is enough for time server. You are not required to implement a multi user time server for this assignment.