Using faculty resources for 236370 Winter 20-21

The resources for the course are located on the Lambda server.
As part of recent security enhancements, access to Technion servers from outside of Technion network is restricted, and Lambda server is available only from withing the Technion.

However, it is possible to connect to Lambda using a vpn, that connects to the Technion network.

Those are the steps required for setting up a vpn, **if you are working from within the Technion you can skip those steps:**

1) install an otp authenticator on your phone (google authenticator is recommended)

2) You will need a token, please follow the instructions here to get one: https://cis.technion.ac.il/en/central-services/communication/off-campus-connection/otp/

At the end of this step you should have an active token on your phone app.

3) install pulse secure vpn from here: https://cis.technion.ac.il/en/central-services/communication/off-campus-connection/ssl-vpn/

4) setting up vpn connection using the following instructions: https://cis.technion.ac.il/en/central-services/communication/off-campus-connection/ssl-vpn/install-pulse-client-windows/

Note: your pin code must consist of exactly 4 numbers.
The password is your pin code followed by the otp token, pay attention that the token is changing every minute**.**

Connecting to Lambda:
After you are connected to a Technion network (using the vps or physically be there), connecting to Lambda is done using a simple ssh.

Connection using command line is done using the following command:
ssh -X <user name>@lambda.cs.technion.ac.il
<password>

If you are connected via VPN and you receive an Unknown Host error, use:
ssh -X <username>@132.68.39.159
<password>

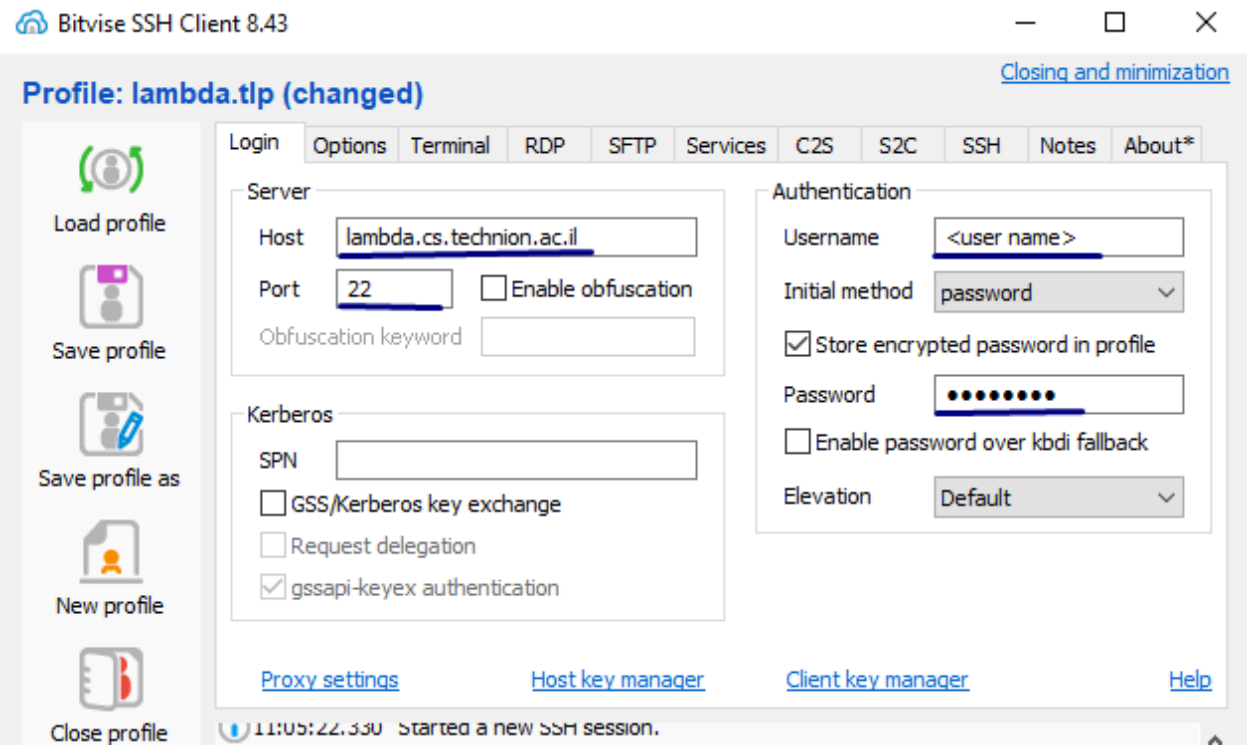
Your username is your @campus.technion.ac.il username and the password is the same one you use to log in to that account.

If you are using cmd in a windows machine, ssh is needs to be installed, this is done using the following script (run cmd as administrator)

```
Set-ExecutionPolicy Bypass -Scope Process -Force; iex ((New-Object Sys-
tem.Net.WebClient).DownloadString('https://chocolatey.org/install.ps1'))
restartenv
choco install openssh
```

A reccomended gui app is bitvise ssh client, you can get it from here: https://cswp.cs.technion.ac.il/bitvise-ssh-client-installation-setup/

connecting using this app, is done using default configurations, and the marked entries in this picture:



Installing a package is done using the command:
`pip3 install --user <package name>`

Installing the packages are required only ones **for every user**, so you are connecting using both hw partners, each partner is required to install the packages.

After the packages are installed, you can start working the actual hw.
Working on Lambda is done as shown in tutorial 3.

More information regarding the Lambda server is available here:
https://hpc.cswp.cs.technion.ac.il/2020/08/31/lambda-computational-cluster/

Please work according to the code of conduct, and let the TA in charge if any technical issue regarding the server arises.