



Course name

BM40A1400 GPGPU Computing

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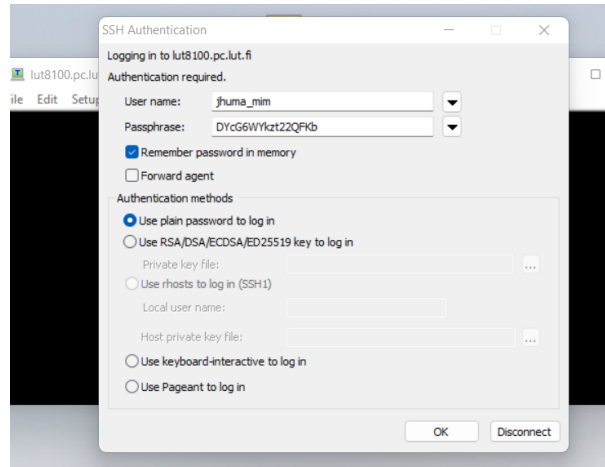
Date : February 6, 2022

Problem 1

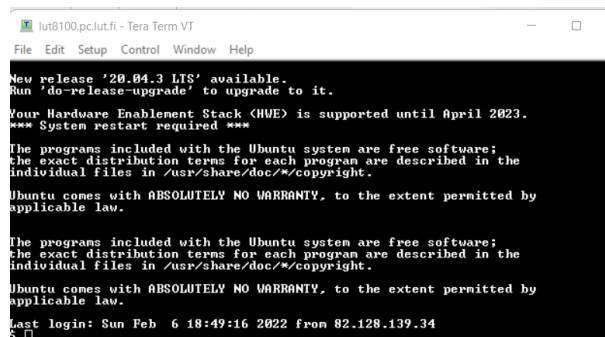
1. Get user account for the LUT CopE NVIDIA. 2. Log in to the GPU machine. 3. Can you find CUDA commands and libraries? Extra points: Install CUDA to your own laptop/desktop.

Solution

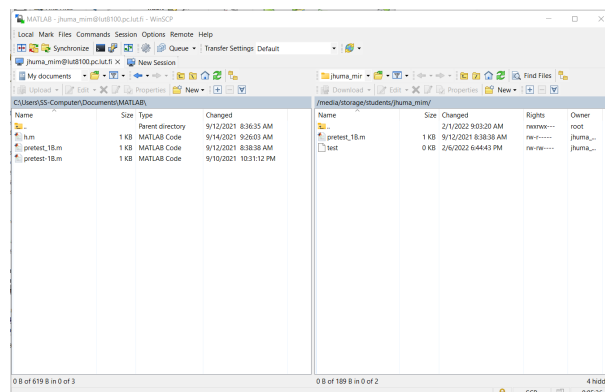
1. At first login the University server.



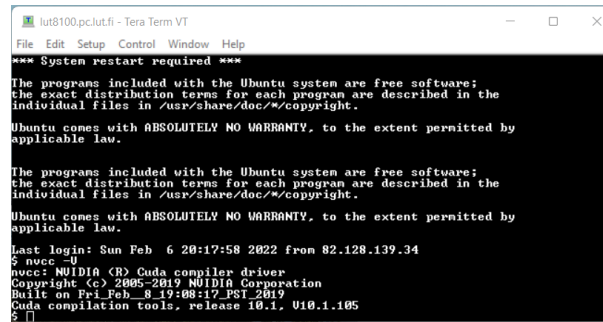
2. Tera Team VT accessing.



3. Local File exchange with the server using WinSCP



4.1 Software stack available on the university GPU server (CUDA).



```
lut8100.pc.lut.fi - Tera Term VT
File Edit Setup Control Window Help
*** System restart required ***

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

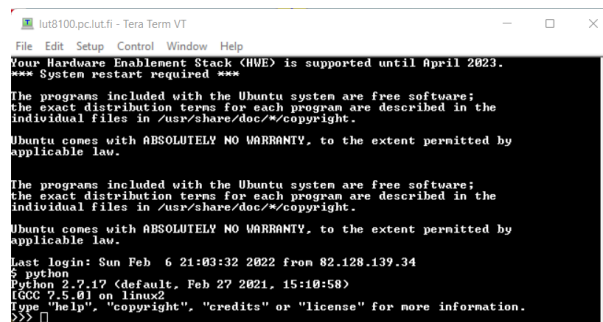
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

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individual files in /usr/share/doc/*/copyright.

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applicable law.

Last login: Sun Feb  6 20:17:58 2022 from 82.128.139.34
$ nvcc -V
nvcc: NVIDIA (R) Cuda compiler driver
Copyright (c) 2005-2019 NVIDIA Corporation
Built on Fri Feb  8 19:08:17 PST 2019
Cuda compilation tools, release 10.1, V10.1.105
$
```

4.2 Software stack available on the university GPU server (Python).



```
lut8100.pc.lut.fi - Tera Term VT
File Edit Setup Control Window Help
Your Hardware Enablement Stack (HWE) is supported until April 2023.
*** System restart required ***

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

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applicable law.

Last login: Sun Feb  6 21:03:32 2022 from 82.128.139.34
$ python
Python 2.7.17 (default, Feb 27 2021, 15:10:58)
[GCC 7.5.0] on linux2
Type "help", "copyright", "credits" or "license" for more information.
>>>
```