

Panduan Mengunduh File yang ada di extra (badak.cs.ui.ac.id) ke Laptop Pribadi / Komputer Pribadi

Pada file tutorial ini terdapat 3 cara untuk mengunduh file yang berada pada server badak yang berisi materi-materi kuliah yang akan digunakan selama Anda mengikuti Mata Kuliah Sistem Operasi. Panduan ini menjelaskan 3 cara untuk mengunduh folder badak ke komputer pribadi Anda yaitu menggunakan Command di terminal, menggunakan Cygwin melalui server kawung dan menggunakan tunneling pada Cygwin.

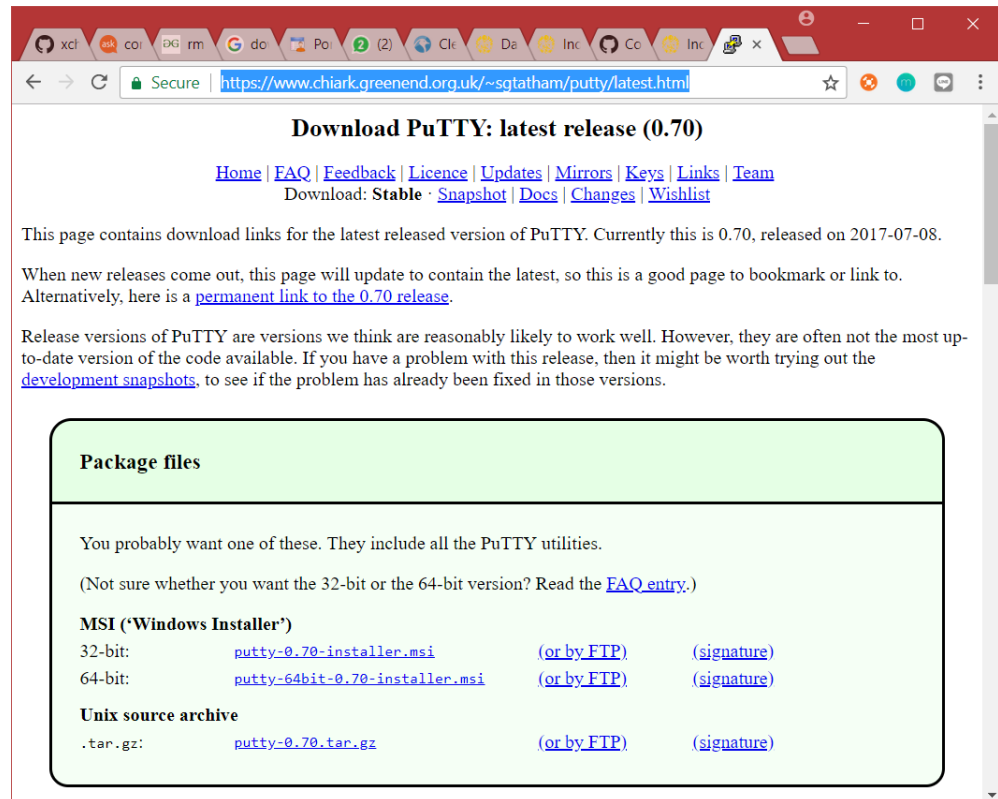
1. Cara Pertama: Menggunakan *Command* di Terminal

1. Tahap Persiapan

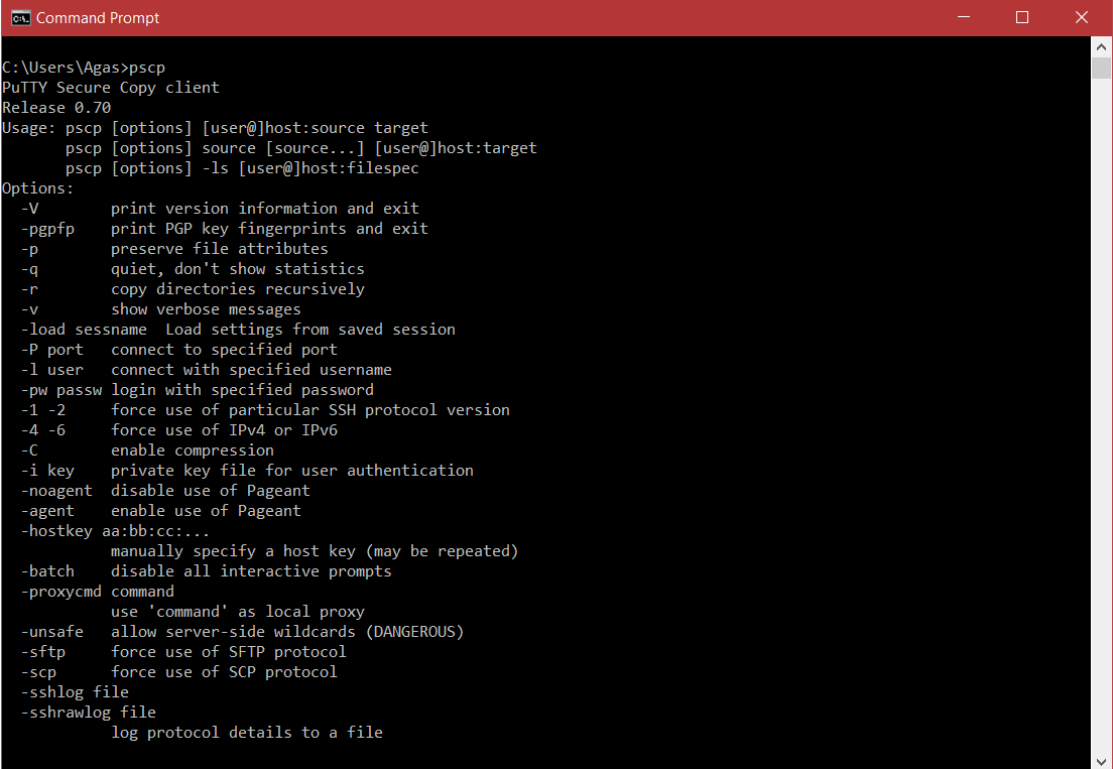
A. Meng-Install Putty

B. Unduh Putty pada link berikut :

<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>



- C. Setelah diunduh, install putty dan buka *command Prompt* (cmd.exe) dan cek apakah bisa menjalankan perintah 'pscp' untuk mengecek apakah putty telah berhasil di install



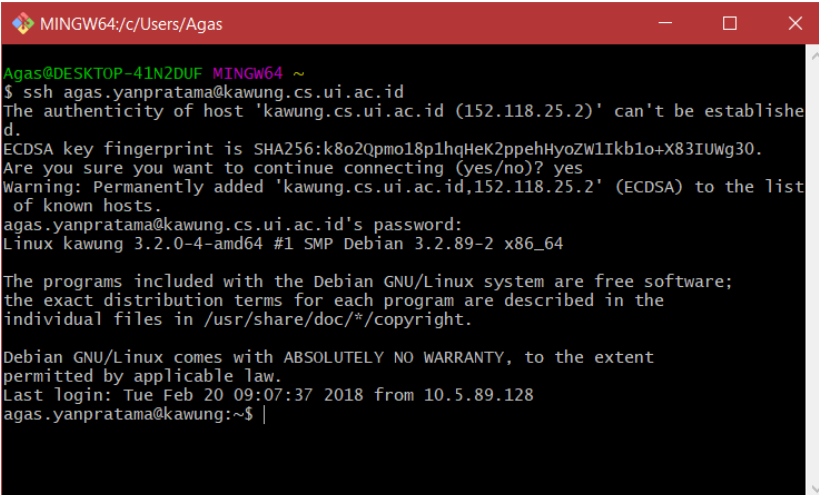
```
Command Prompt

C:\Users\Agas>pscp
PuTTY Secure Copy client
Release 0.70
Usage: pscp [options] [user@]host:source target
       pscp [options] source [source...] [user@]host:target
       pscp [options] -ls [user@]host:filespec
Options:
  -V          print version information and exit
  -pgpfp      print PGP key fingerprints and exit
  -p          preserve file attributes
  -q          quiet, don't show statistics
  -r          copy directories recursively
  -v          show verbose messages
  -load sessname load settings from saved session
  -P port      connect to specified port
  -l user      connect with specified username
  -pw passw    login with specified password
  -1 -2        force use of particular SSH protocol version
  -4 -6        force use of IPv4 or IPv6
  -C          enable compression
  -i key       private key file for user authentication
  -noagent     disable use of Pageant
  -agent       enable use of Pageant
  -hostkey aa:bb:cc:... manually specify a host key (may be repeated)
  -batch       disable all interactive prompts
  -proxycmd command use 'command' as local proxy
  -unsafe      allow server-side wildcards (DANGEROUS)
  -sftp        force use of SFTP protocol
  -scp         force use of SCP protocol
  -sshlog file  log protocol details to a file
  -sshrawlog file log protocol details to a file
```

2. Tahap Meng-Copy file dari extra ke localdir yang ada di kawung

- A. Jalankan *GitBash/Bash/Putty/Cygwin*, Contoh menggunakan *GitBash*

- B. Buat koneksi ke kawung.cs.ui.ac.id



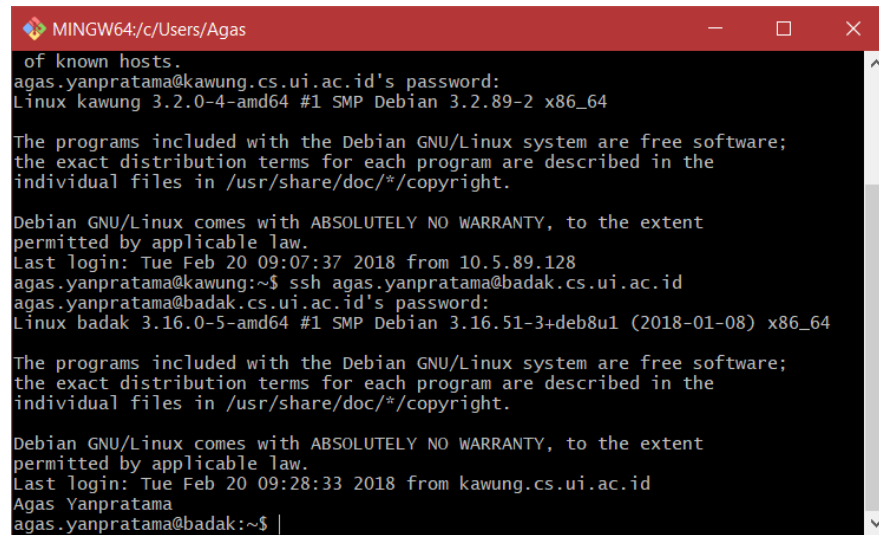
```
MINGW64/c/Users/Agas

Agas@DESKTOP-41N2DUF MINGW64 ~
$ ssh agas.yanpratama@kawung.cs.ui.ac.id
The authenticity of host 'kawung.cs.ui.ac.id (152.118.25.2)' can't be established.
ECDSA key fingerprint is SHA256:k8o2Qpmo18p1hqHeK2ppehHyoZW1Ikbl0+x83IUwg30.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'kawung.cs.ui.ac.id,152.118.25.2' (ECDSA) to the list of known hosts.
agas.yanpratama@kawung.cs.ui.ac.id's password:
Linux kawung 3.2.0-4-amd64 #1 SMP Debian 3.2.89-2 x86_64

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

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue Feb 20 09:07:37 2018 from 10.5.89.128
agas.yanpratama@kawung:~$
```

C. Selanjutnya buat koneksi ke badak.cs.ui.ac.id



```
MINGW64/c/Users/Agas
of known hosts.
agas.yanpratama@kawung.cs.ui.ac.id's password:
Linux kawung 3.2.0-4-amd64 #1 SMP Debian 3.2.89-2 x86_64

The programs included with the Debian GNU/Linux system are free software;
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permitted by applicable law.
Last login: Tue Feb 20 09:07:37 2018 from 10.5.89.128
agas.yanpratama@kawung:~$ ssh agas.yanpratama@badak.cs.ui.ac.id
agas.yanpratama@badak.cs.ui.ac.id's password:
Linux badak 3.16.0-5-amd64 #1 SMP Debian 3.16.51-3+deb8u1 (2018-01-08) x86_64

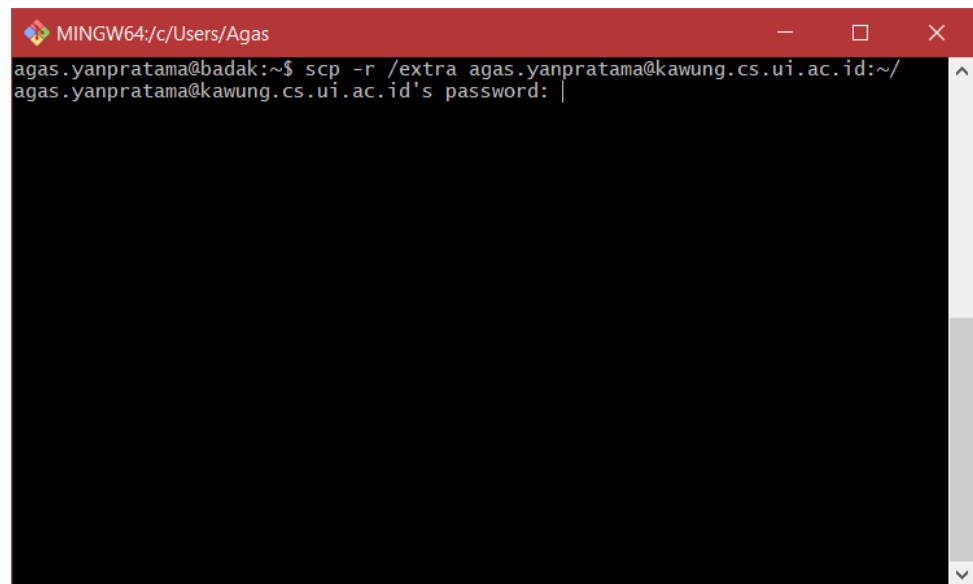
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individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue Feb 20 09:28:33 2018 from kawung.cs.ui.ac.id
Agas Yanpratama
agas.yanpratama@badak:~$
```

D. Lalu, *copy* folder extra ke localdir kita yang ada di kawung.cs.ui.ac.id
dengan *command*

scp -r /extra [akun sso]@kawung.cs.ui.ac.id:~/

contoh:



```
MINGW64/c/Users/Agas
agas.yanpratama@badak:~$ scp -r /extra agas.yanpratama@kawung.cs.ui.ac.id:~/
agas.yanpratama@kawung.cs.ui.ac.id's password: |
```

E. Lalu, *logout* dari badak dan kembali ke kawung untuk mengunduh folder
extra ke komputer/laptop kita. Cara *logout* adalah dengan mengetik
command '*logout*' lalu jalankan.

3. Tahap Meng-Copy folder dari kawung ke komputer / laptop kita.

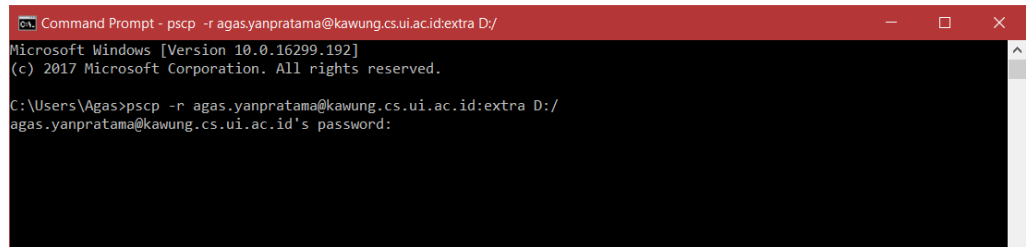
A. Unduh dari kawung ke komputer kita bisa menggunakan command 'pscp' yang berasal dari putty, jadi pastikan dulu putty telah terinstall pada komputer Anda.

B. Buka Command Prompt lalu jalankan perintah berikut

pscp -r [akun-ssol@kawung.cs.ui.ac.id:extra [tempat penyimpanan]

Contoh:

pscp -r agas.yanpratama@kawung.cs.ui.ac.id:extra D:/

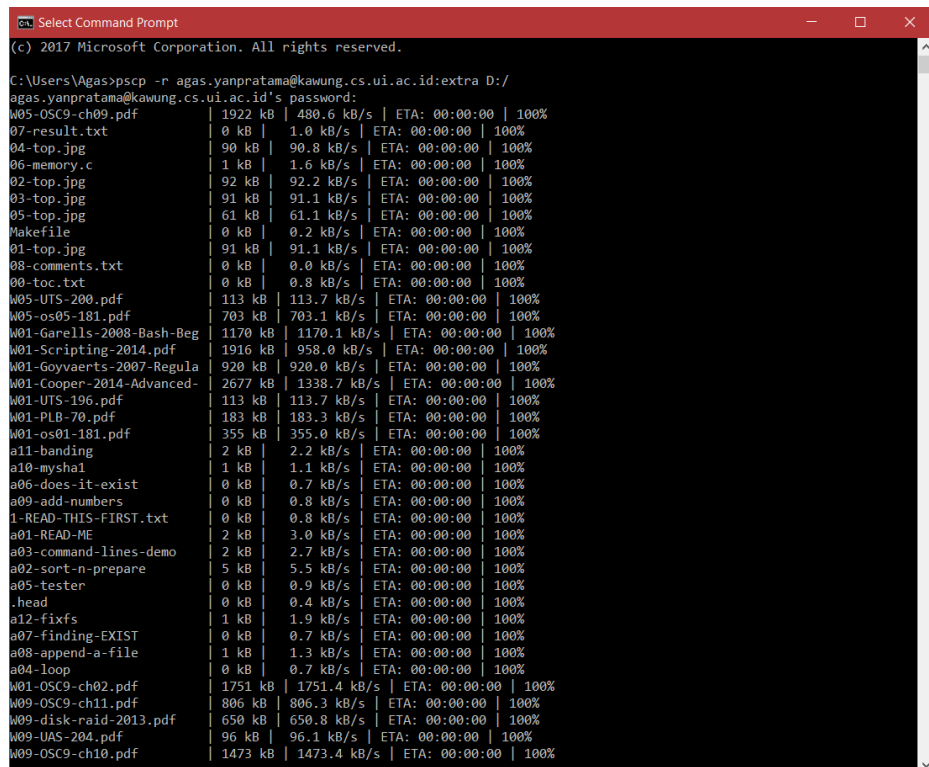


```
Command Prompt - pscp -r agas.yanpratama@kawung.cs.ui.ac.id:extra D:/
Microsoft Windows [Version 10.0.16299.192]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\Agas>pscp -r agas.yanpratama@kawung.cs.ui.ac.id:extra D:/
agas.yanpratama@kawung.cs.ui.ac.id's password:
```

C. Masukkan Password.

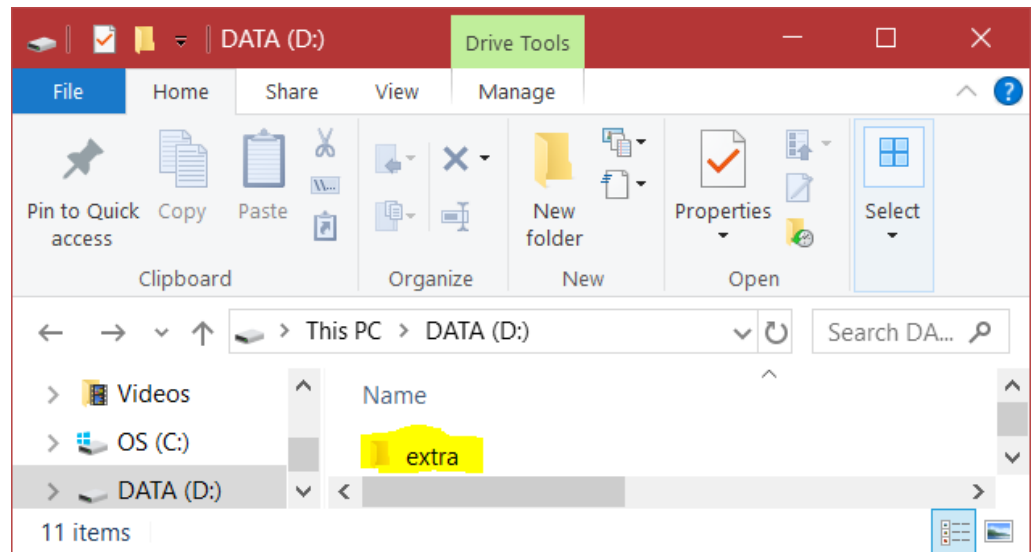
D. Tunggu hingga proses selesai.



```
Select Command Prompt
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\Agas>pscp -r agas.yanpratama@kawung.cs.ui.ac.id:extra D:/
agas.yanpratama@kawung.cs.ui.ac.id's password:
W05-OSC9-ch09.pdf      | 1922 kB | 480.6 kB/s | ETA: 00:00:00 | 100%
07-result.txt         | 0 kB   | 1.0 kB/s   | ETA: 00:00:00 | 100%
04-top.jpg            | 90 kB  | 90.8 kB/s  | ETA: 00:00:00 | 100%
06-memory.c          | 1 kB   | 1.6 kB/s   | ETA: 00:00:00 | 100%
02-top.jpg           | 92 kB  | 92.2 kB/s  | ETA: 00:00:00 | 100%
03-top.jpg           | 91 kB  | 91.1 kB/s  | ETA: 00:00:00 | 100%
05-top.jpg           | 61 kB  | 61.1 kB/s  | ETA: 00:00:00 | 100%
Makefile              | 0 kB   | 0.2 kB/s   | ETA: 00:00:00 | 100%
01-top.jpg           | 91 kB  | 91.1 kB/s  | ETA: 00:00:00 | 100%
08-comments.txt      | 0 kB   | 0.0 kB/s   | ETA: 00:00:00 | 100%
00-toc.txt            | 0 kB   | 0.8 kB/s   | ETA: 00:00:00 | 100%
W05-UTS-200.pdf       | 113 kB | 113.7 kB/s | ETA: 00:00:00 | 100%
W05-os05-181.pdf     | 703 kB | 703.1 kB/s | ETA: 00:00:00 | 100%
W01-Garells-2008-Bash-Beg | 1170 kB | 1170.1 kB/s | ETA: 00:00:00 | 100%
W01-Scripting-2014.pdf | 1916 kB | 958.0 kB/s | ETA: 00:00:00 | 100%
W01-Goyvaerts-2007-Regula | 920 kB | 920.0 kB/s | ETA: 00:00:00 | 100%
W01-Cooper-2014-Advanced- | 2677 kB | 1338.7 kB/s | ETA: 00:00:00 | 100%
W01-UTS-196.pdf      | 113 kB | 113.7 kB/s | ETA: 00:00:00 | 100%
W01-PLB-70.pdf       | 183 kB | 183.3 kB/s | ETA: 00:00:00 | 100%
W01-os01-181.pdf     | 355 kB | 355.0 kB/s | ETA: 00:00:00 | 100%
a11-banding          | 2 kB   | 2.2 kB/s   | ETA: 00:00:00 | 100%
a10-myshal           | 1 kB   | 1.1 kB/s   | ETA: 00:00:00 | 100%
a06-does-it-exist    | 0 kB   | 0.7 kB/s   | ETA: 00:00:00 | 100%
a09-add-numbers      | 0 kB   | 0.8 kB/s   | ETA: 00:00:00 | 100%
1-READ-THIS-FIRST.txt | 0 kB   | 0.8 kB/s   | ETA: 00:00:00 | 100%
a01-READ-ME          | 2 kB   | 3.0 kB/s   | ETA: 00:00:00 | 100%
a03-command-lines-demo | 2 kB   | 2.7 kB/s   | ETA: 00:00:00 | 100%
a02-sort-n-prepare   | 5 kB   | 5.5 kB/s   | ETA: 00:00:00 | 100%
a05-tester           | 0 kB   | 0.9 kB/s   | ETA: 00:00:00 | 100%
.head                | 0 kB   | 0.4 kB/s   | ETA: 00:00:00 | 100%
a12-fixfs            | 1 kB   | 1.9 kB/s   | ETA: 00:00:00 | 100%
a07-finding-EXIST    | 0 kB   | 0.7 kB/s   | ETA: 00:00:00 | 100%
a08-append-a-file    | 1 kB   | 1.3 kB/s   | ETA: 00:00:00 | 100%
a04-loop             | 0 kB   | 0.7 kB/s   | ETA: 00:00:00 | 100%
W01-OSC9-ch02.pdf    | 1751 kB | 1751.4 kB/s | ETA: 00:00:00 | 100%
W09-OSC9-ch11.pdf    | 806 kB | 806.3 kB/s | ETA: 00:00:00 | 100%
W09-disk-raid-2013.pdf | 650 kB | 650.8 kB/s | ETA: 00:00:00 | 100%
W09-UAS-204.pdf      | 96 kB  | 96.1 kB/s  | ETA: 00:00:00 | 100%
W09-OSC9-ch10.pdf    | 1473 kB | 1473.4 kB/s | ETA: 00:00:00 | 100%
```

E. Setelah proses selesai maka folder extra sudah tersimpan di komputer anda. 😊



2. Cara Kedua: Menggunakan Winscp

A. Tahap Persiapan

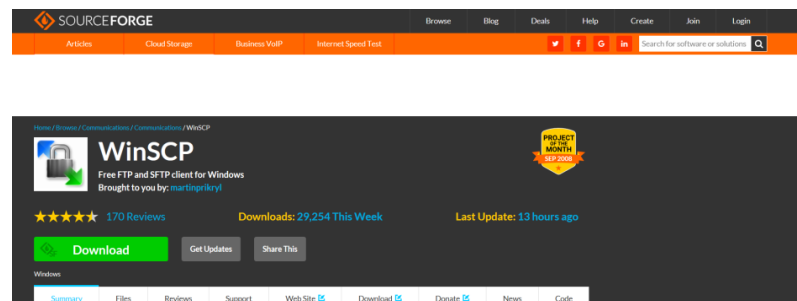
I. Meng-Install Winscp

a) Unduh Winscp dan install dari link berikut:

<https://winscp.net/eng/Unduh.php>

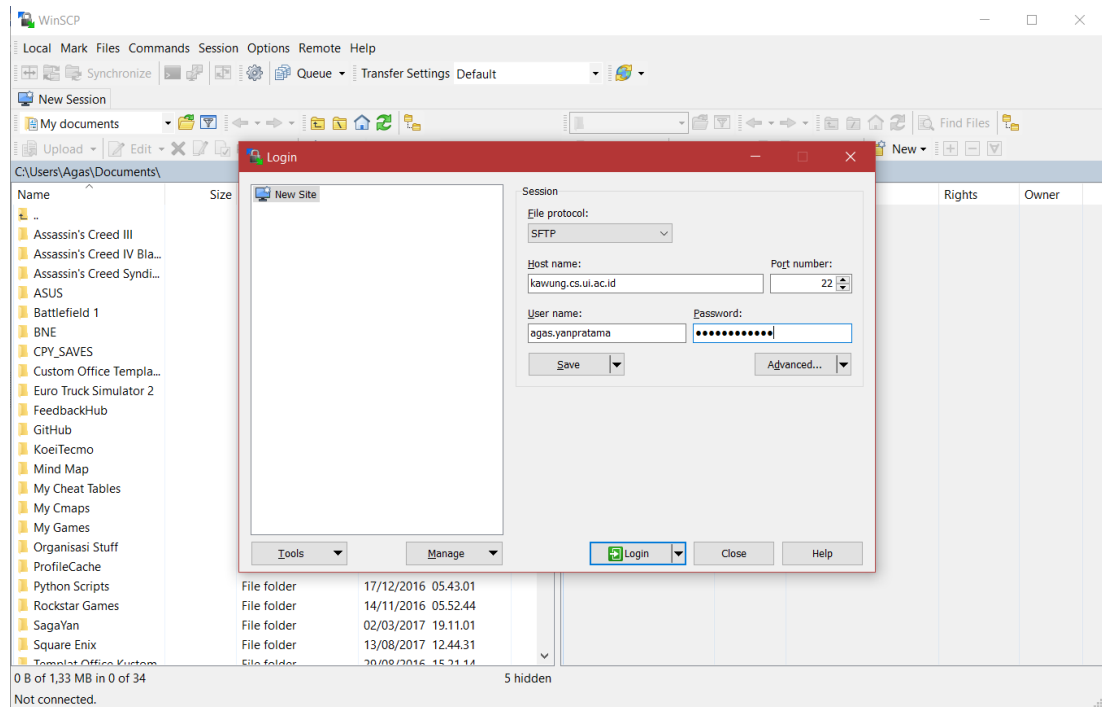


b) Klik tombol “Download *Winscp*” Lalu anda akan di-*redirect* ke halaman baru yang akan memulai proses Unduh setelah 5 detik



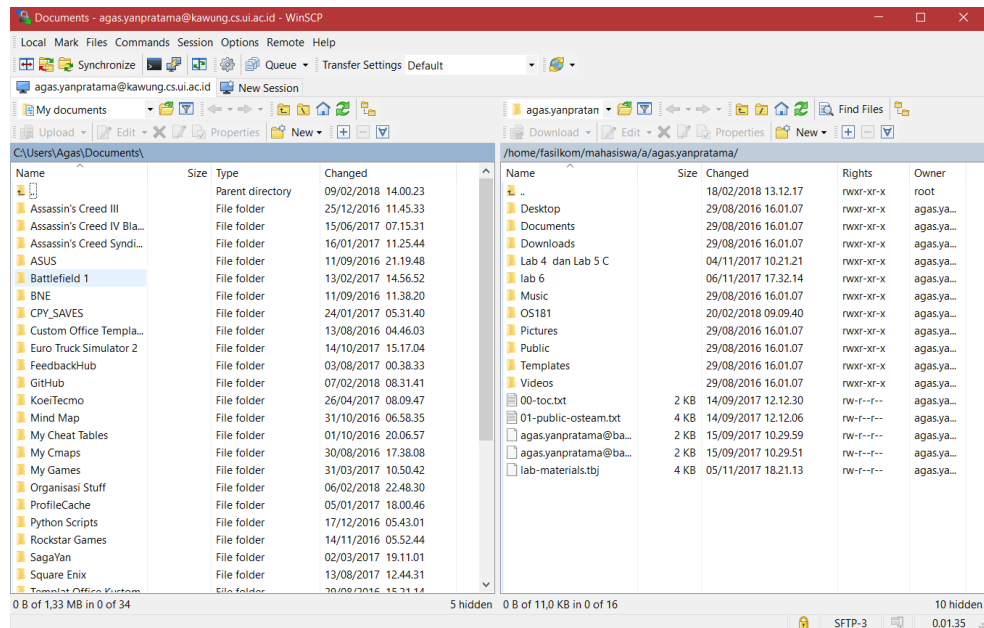
c) Install File *Setup* Winscp yang telah diunduh lalu buka program Winscp yang telah di-*install* sebelumnya.

II. Menjalankan Program Winscp



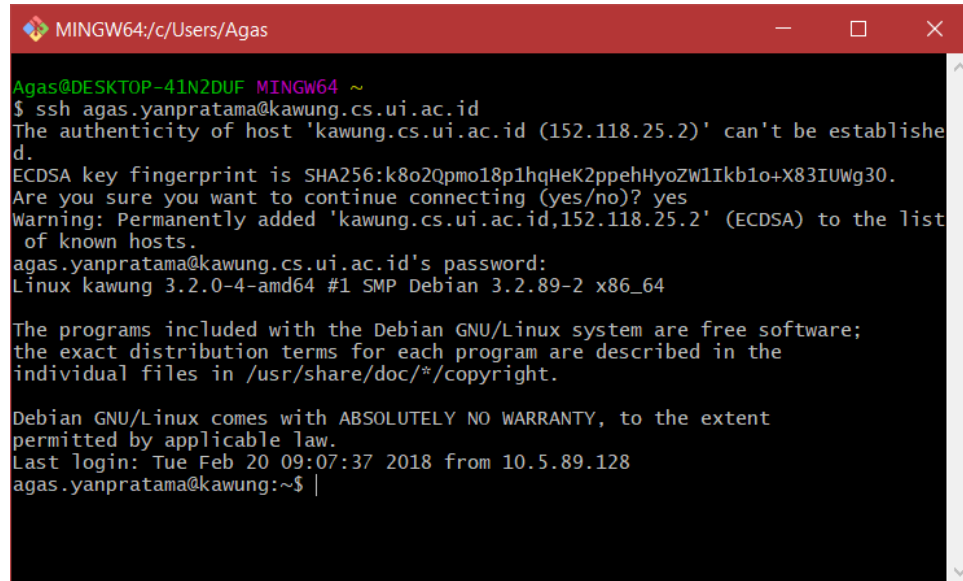
III. Setelah itu, Pilih Login.

IV. Setelah Koneksi berhasil maka file yang ada di local milik kita di *kawang.cs.ui.ac.id* akan terlihat



B. Tahap Meng-Copy file dari extra ke localdir yang ada di kawung

- I. Jalankan *GitBash/Bash/Putty/Cygwin*, Contoh menggunakan *GitBash*
- II. Buat koneksi ke kawung.cs.ui.ac.id

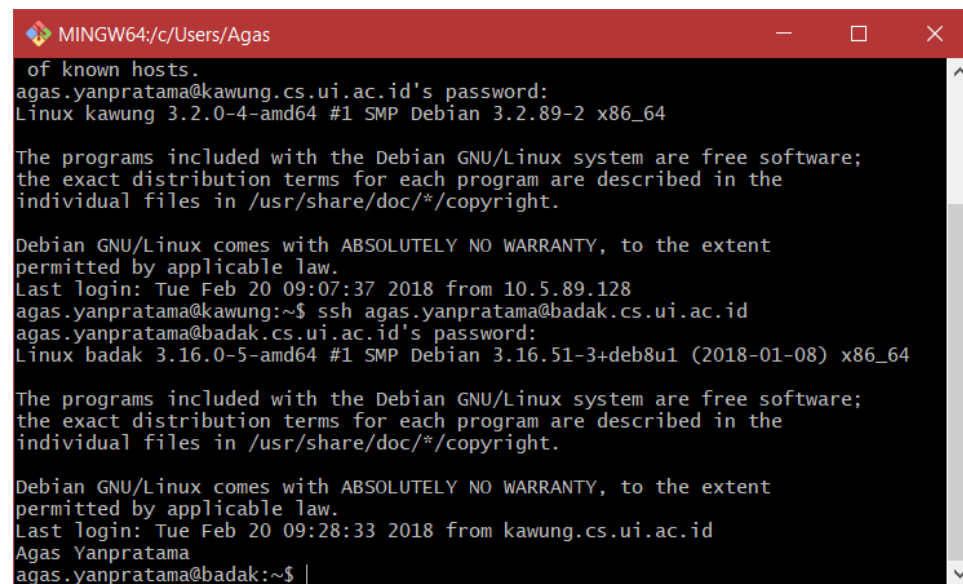


```
MINGW64:/c/Users/Agas
Agas@DESKTOP-41N2DUF MINGW64 ~
$ ssh agas.yanpratama@kawung.cs.ui.ac.id
The authenticity of host 'kawung.cs.ui.ac.id (152.118.25.2)' can't be established.
ECDSA key fingerprint is SHA256:k8o2Qpmo18p1hqHeK2ppehHyoZW1Ikb1o+X83IUWg30.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'kawung.cs.ui.ac.id,152.118.25.2' (ECDSA) to the list of known hosts.
agas.yanpratama@kawung.cs.ui.ac.id's password:
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permitted by applicable law.
Last login: Tue Feb 20 09:07:37 2018 from 10.5.89.128
agas.yanpratama@kawung:~$
```

- III. Selanjutnya buat koneksi ke badak.cs.ui.ac.id



```
MINGW64:/c/Users/Agas
agas.yanpratama@kawung.cs.ui.ac.id's password:
Linux kawung 3.2.0-4-amd64 #1 SMP Debian 3.2.89-2 x86_64

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Last login: Tue Feb 20 09:07:37 2018 from 10.5.89.128
agas.yanpratama@kawung:~$ ssh agas.yanpratama@badak.cs.ui.ac.id
agas.yanpratama@badak.cs.ui.ac.id's password:
Linux badak 3.16.0-5-amd64 #1 SMP Debian 3.16.51-3+deb8u1 (2018-01-08) x86_64

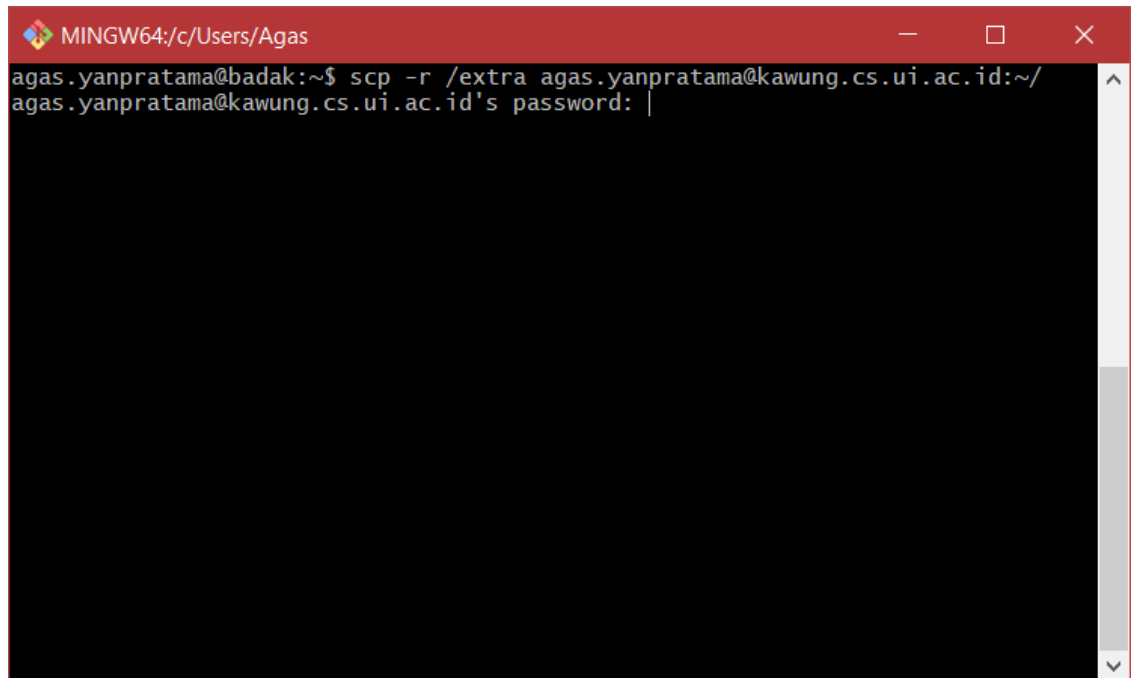
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permitted by applicable law.
Last login: Tue Feb 20 09:28:33 2018 from kawung.cs.ui.ac.id
Agas Yanpratama
agas.yanpratama@badak:~$
```

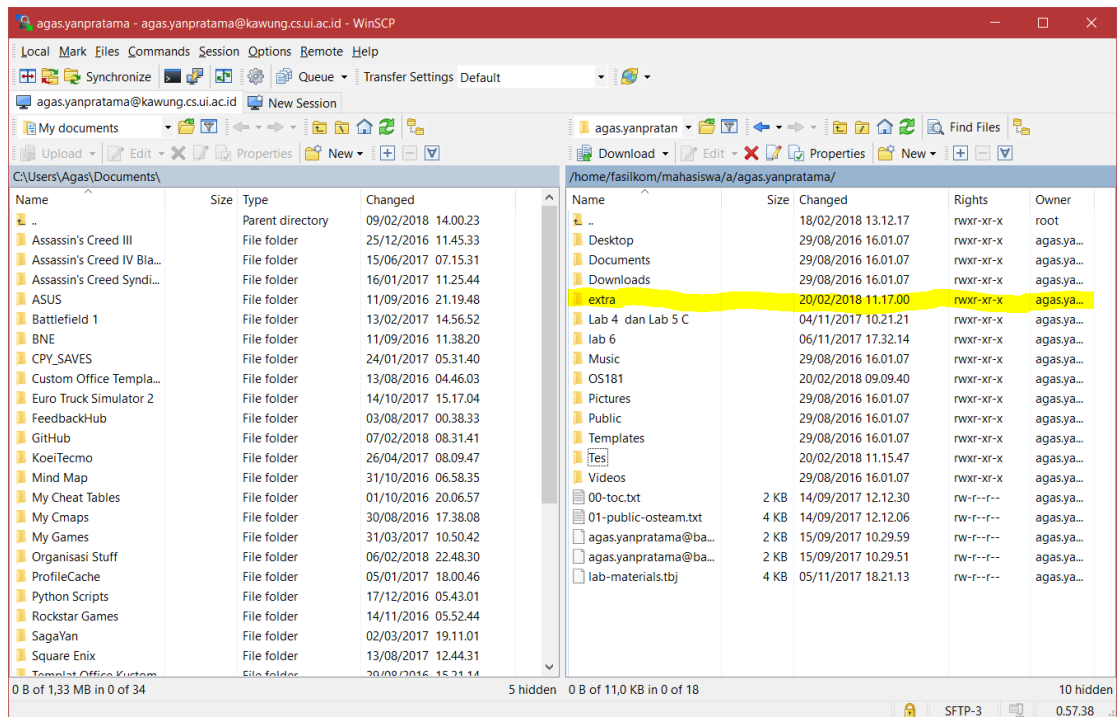
- IV. Lalu, *copy* folder extra ke localdir kita yang ada di kawung.cs.ui.ac.id dengan *command*

scp -r /extra [akun sso]@kawung.cs.ui.ac.id:~/

contoh:

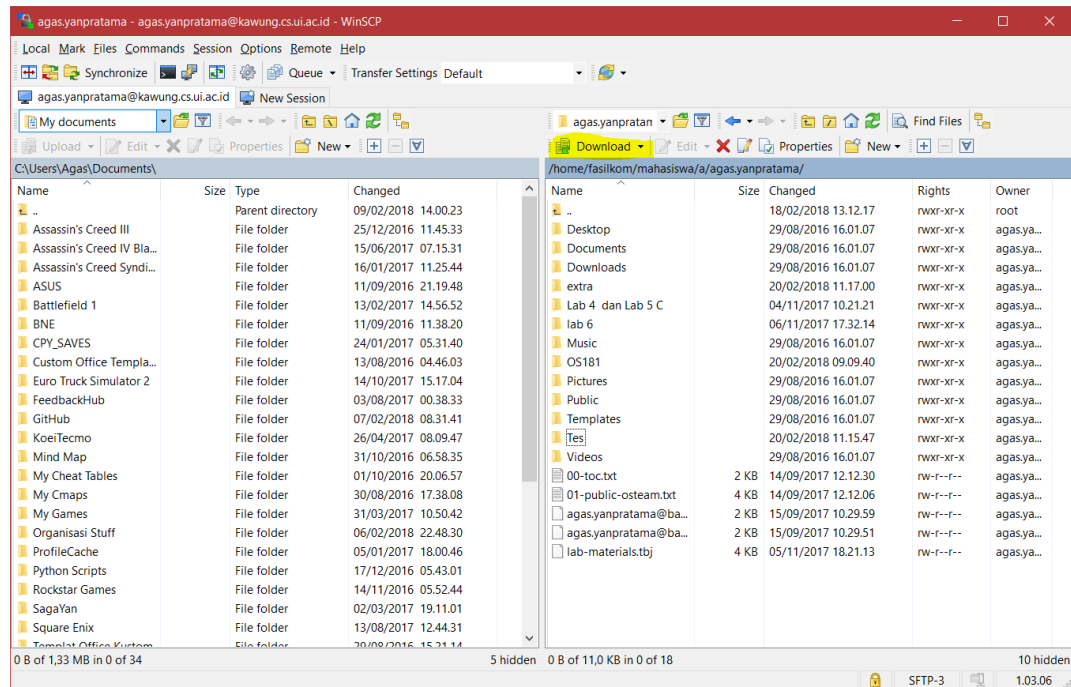


- V. Logout lalu lihat winScp maka telah ada folder extra yang berisi file file yang ada di folder extra pada Badak

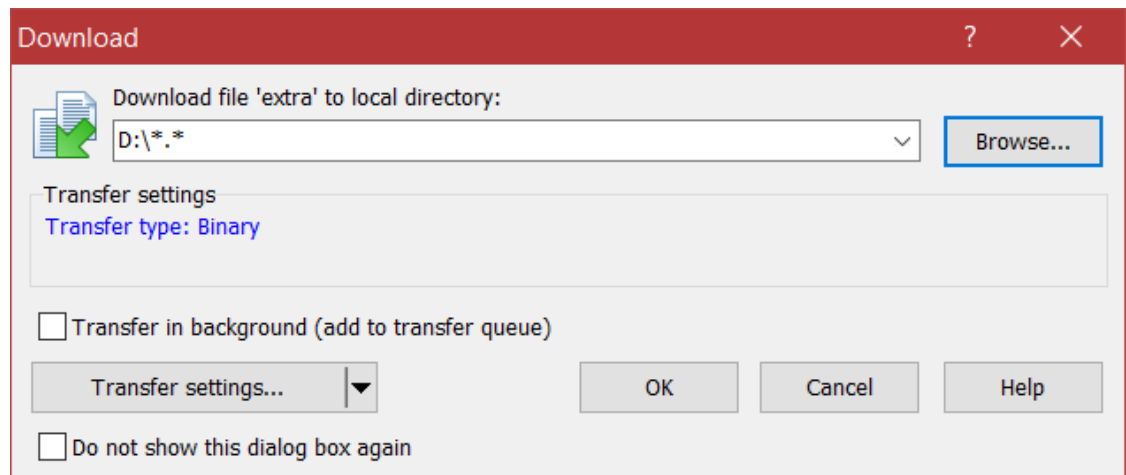


C. Tahap Terakhir, Copy dari kawung ke laptop pribadi menggunakan Winscp

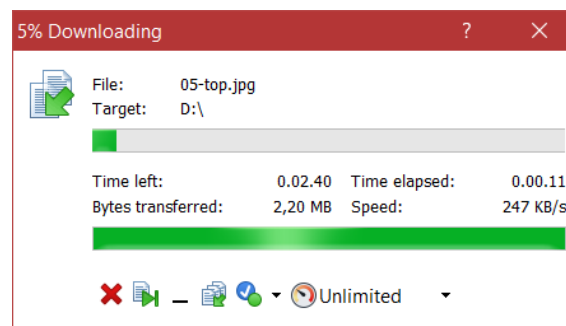
I. Pilih folder Extra lalu klik Unduh



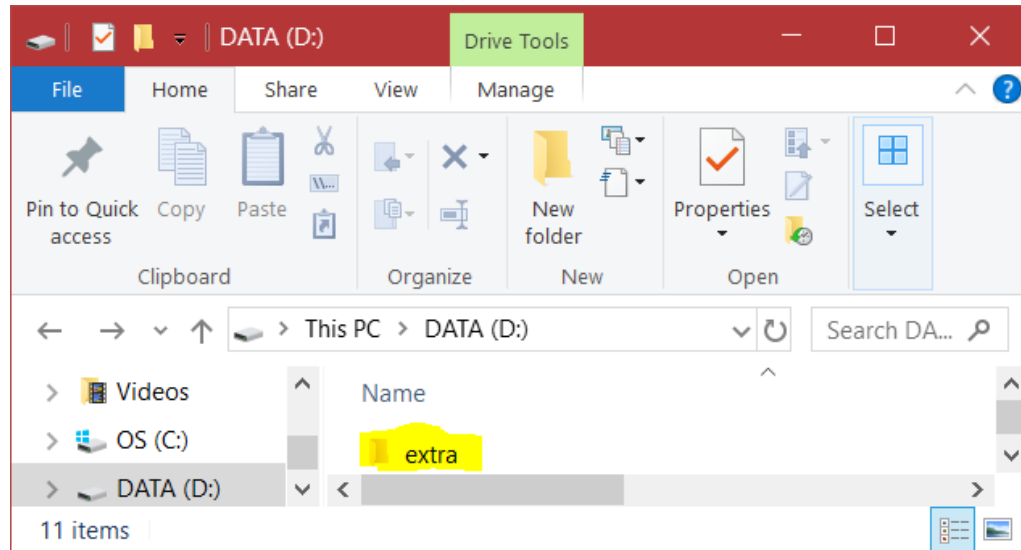
II. Lalu, pilih *directory* dimana kita bisa menyimpan folder extra di laptop kita.



III. Tunggu hingga proses *Unduh* selesai.



- IV. Cek *Directory* dimana anda menyimpan folder tersebut di laptop anda, dan anda bisa melihat bahwa folder *extra* tersebut sudah ada di laptop anda.



3. Cara Ketiga: Tunneling menggunakan WinSCP

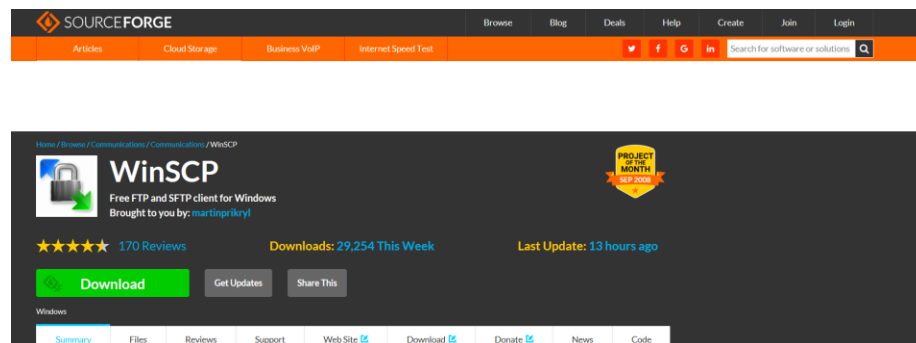
1. Meng-Install Winscp

A. Unduh Winscp dan install dari link berikut:

<https://winscp.net/eng/Unduh.php>



B. Klik tombol “Download Winscp” Lalu anda akan di-redirect ke halaman baru yang akan memulai proses unduh setelah 5 detik

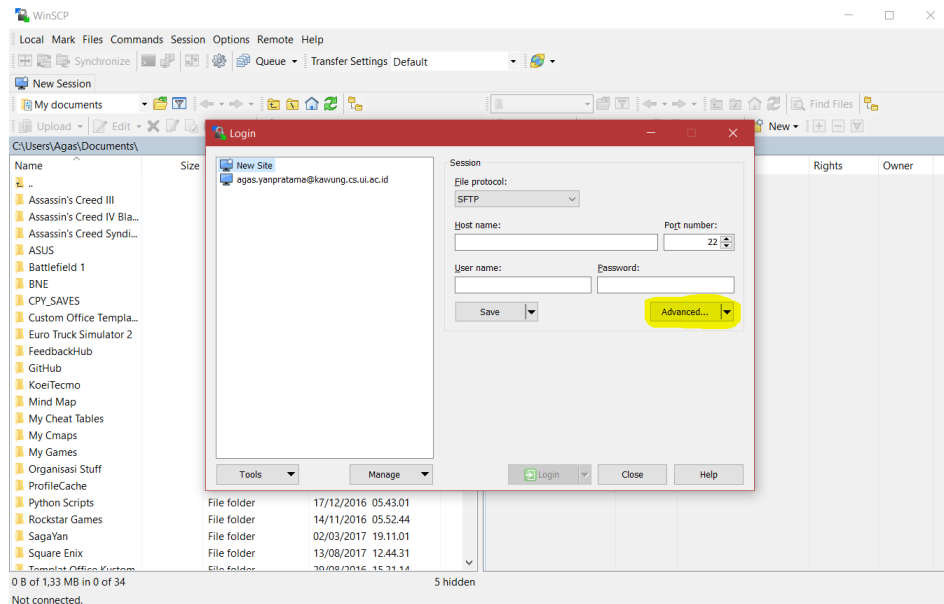


C. Install File Setup Winscp yang telah diunduh lalu buka program Winscp yang telah di-install sebelumnya.

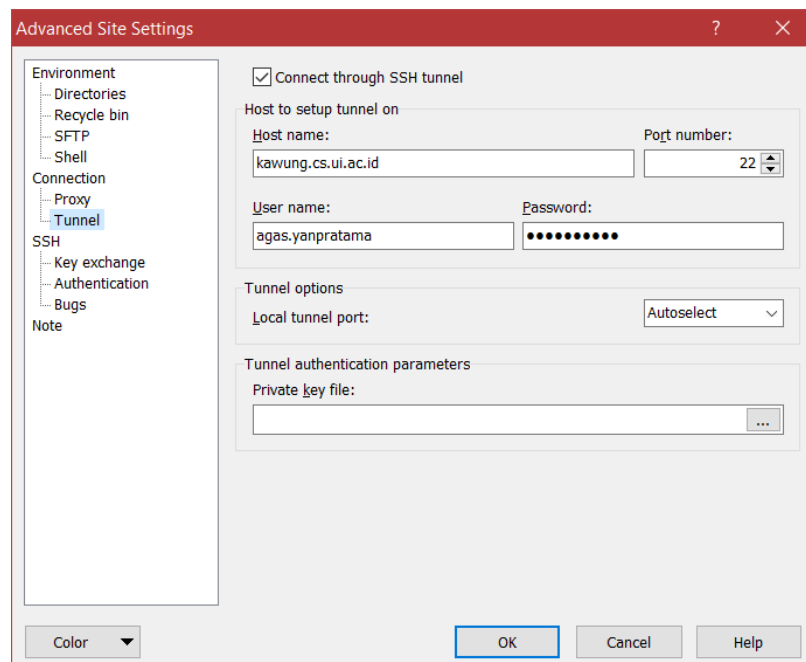
2. Pengaturan Winscp untuk Tunelling

A. Jalankan WinScp.

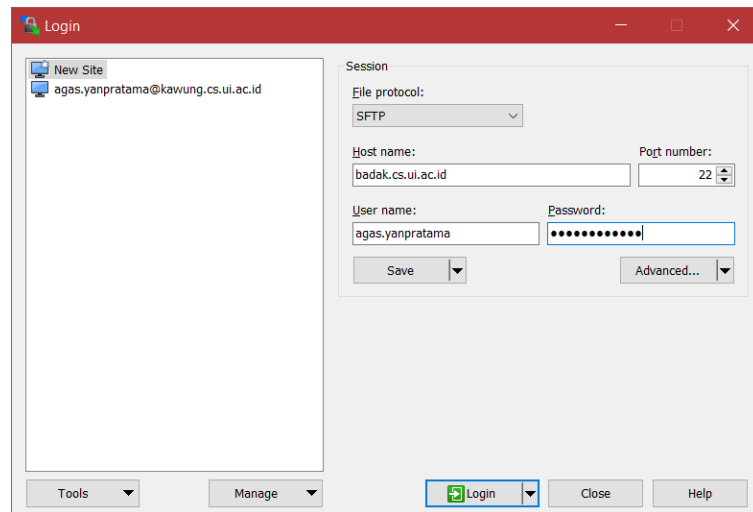
B. Klik tombol “Advanced” lalu akan muncul window baru



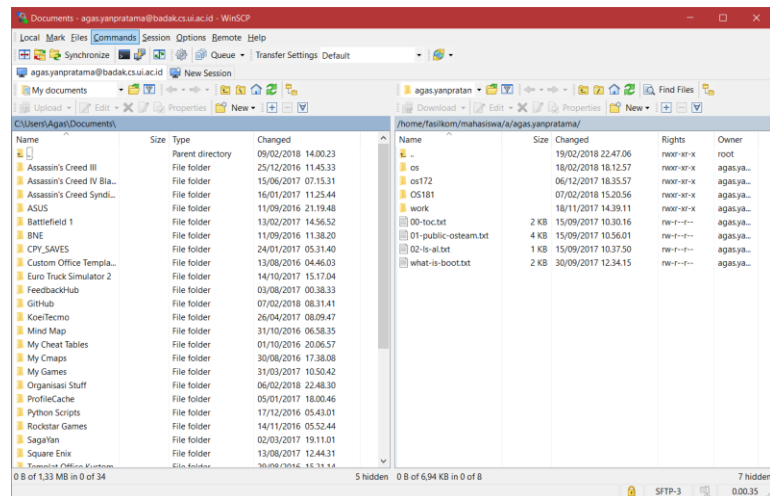
C. Setting tunnel seperti gambar dibawah



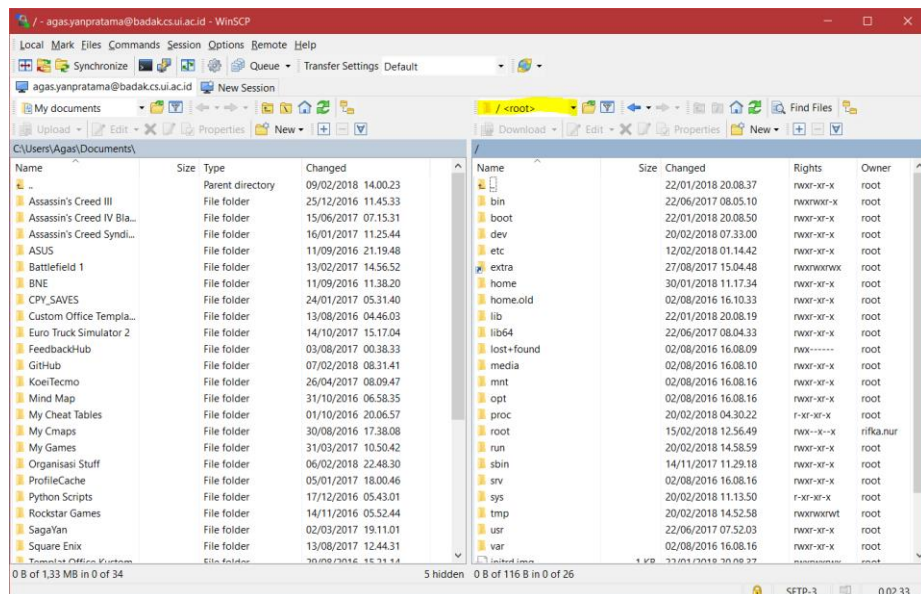
D. Setelah itu *setting* untuk mengkoneksikan ke badak.cs.ui.ac.id



E. Anda telah terkoneksi dengan badak.cs.ui.ac.id dengan WinScp

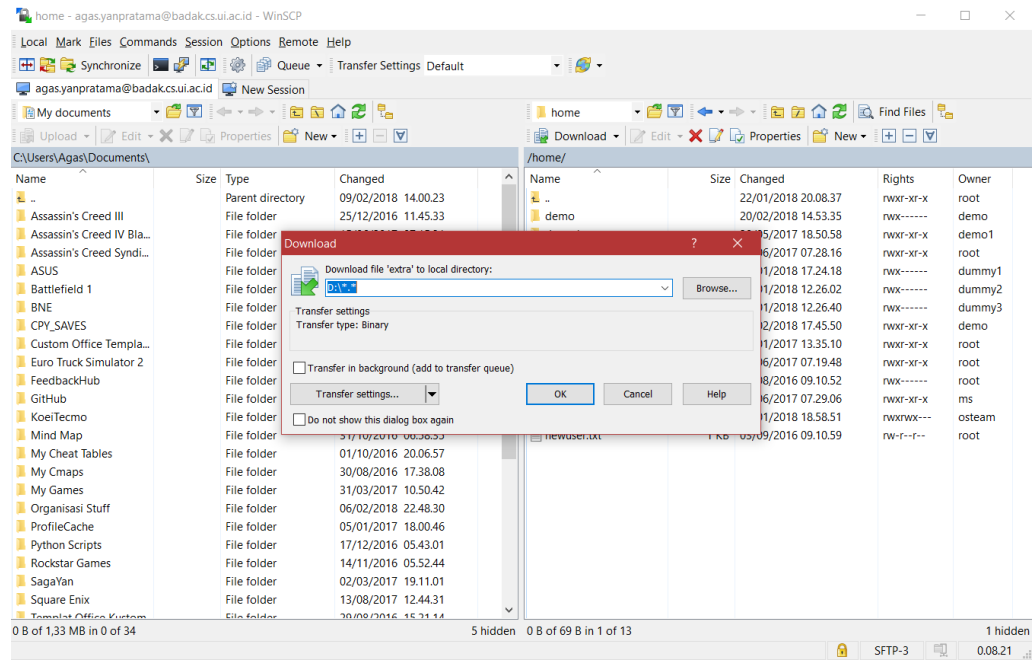


F. Cari Extra badak yang terletak pada root (*Highlight Kuning* menunjukkan folder yang sedang dilihat).

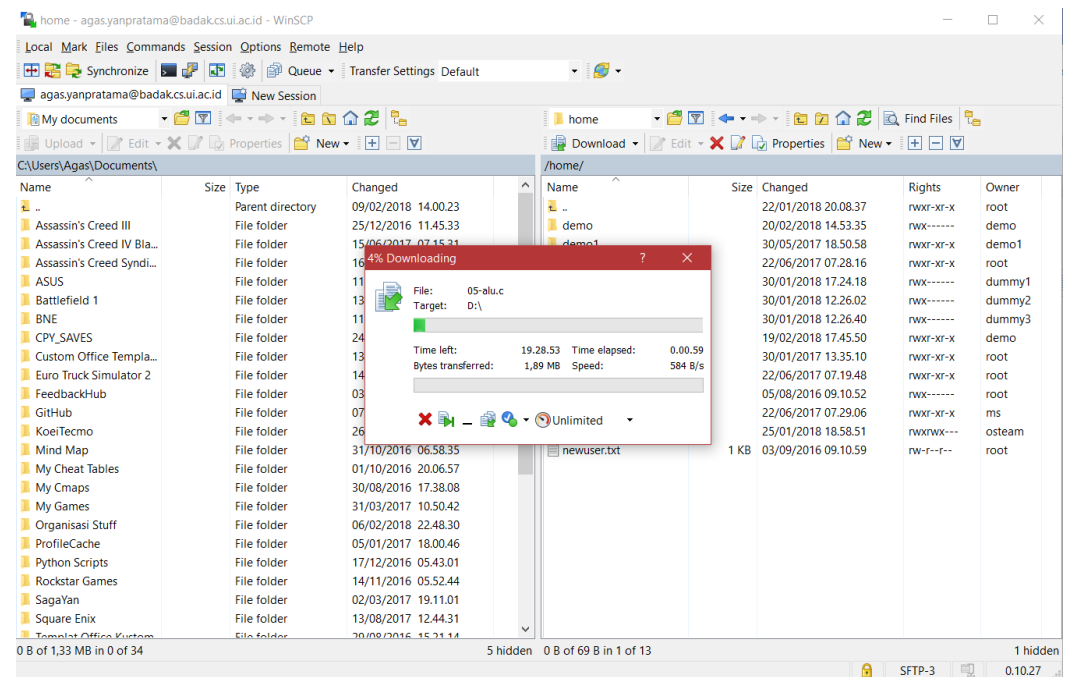


G. Extra terletak pada /home/extra

H. Lalu, Unduh folder extra yang terletak pada badak.



I. Tunggu, hingga proses *download* selesai.



J. File Extra telah tersedia pada laptop atau Komputer Anda.