PRAKTIKUM SISTEM OPERASI

MODUL 1

Disusun Oleh:

NAMA   : SURYA SUMIRAT

NIM   : L200190217

KELAS   : F

INFORMATIKA

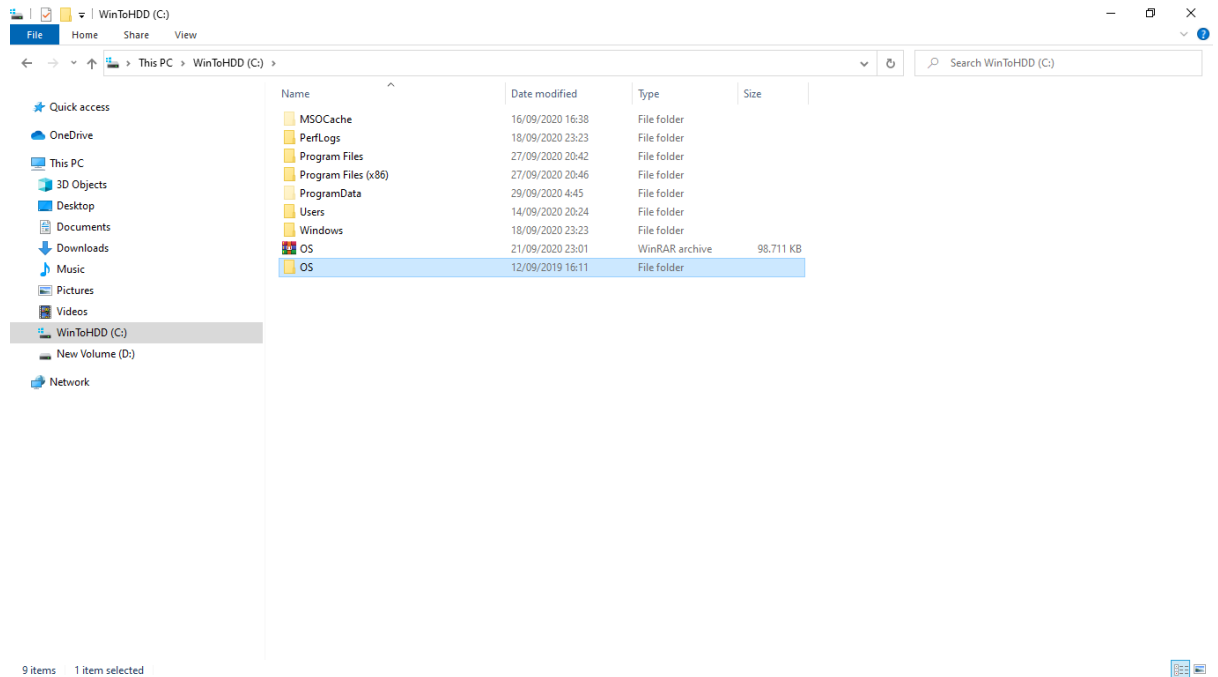**FAKULTAS KOMUNIKASI DAN INFORMATIKA**

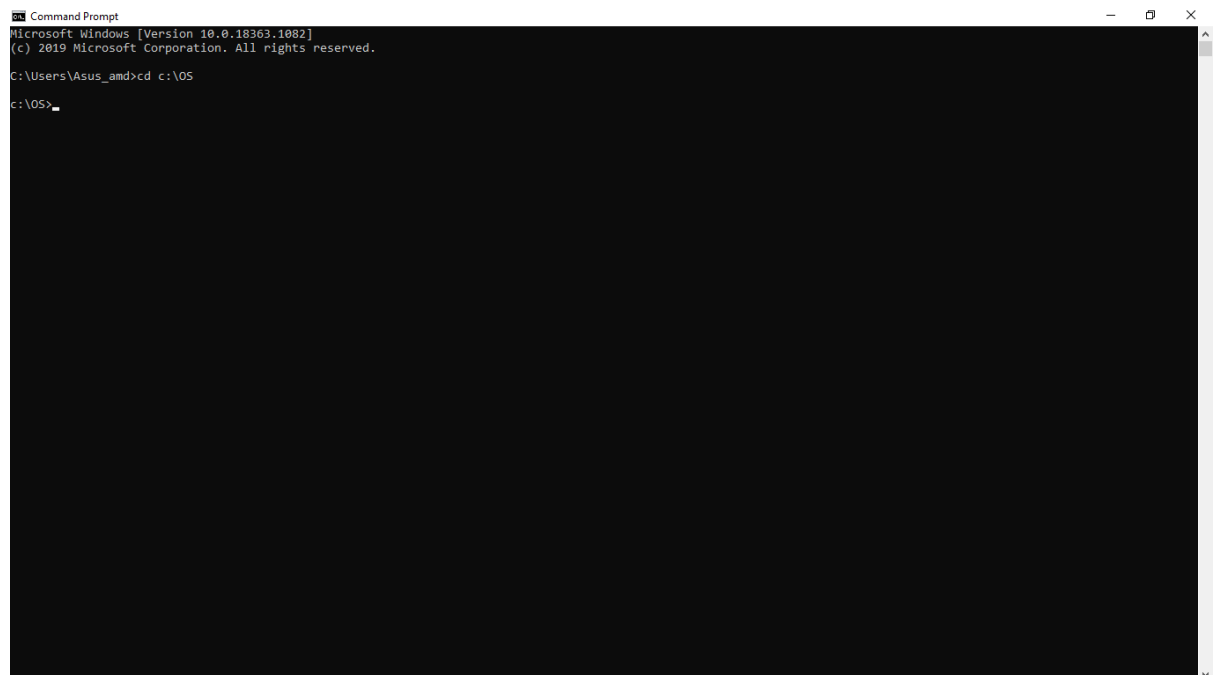**UNIVERSITAS MUHAMMADIYAH SURAKARTA**

2020 / 2021

Langkah Kerja

Menuju ke Direktori Kerja

1. Extract file OS.zip ke disk C

2. Jalankan program "Command Promp"' atau "cmd". Kemudian ketik C:\OS (enter)

3. ketik perintah 'dir' untuk melihat isi folder OS

4. ketik perintah 'setpath' untuk menjalankan setpath

5. Menuju ke folder LAB1 dengan perintah 'cd LAB\LAB1'


```
Microsoft Windows [Version 10.0.18363.1082]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Asus_amd>cd c:\OS

c:\OS>dir
 Volume in drive C is WinToHDD
 Volume Serial Number is 7436-E297

 Directory of c:\OS

12/09/2019  16:11    <DIR>          .
12/09/2019  16:11    <DIR>          ..
12/09/2019  16:11    <DIR>          Bochs-2.3.5
12/09/2019  16:11    <DIR>          Dev-Cpp
17/12/2008  00:08         1.096.291 i386.pdf
12/09/2019  16:11    <DIR>          LAB
17/12/2008  00:07           846.920 pcasm-book.pdf
17/12/2008  01:44                86 Setpath.bat
13/12/2008  14:12           716.512 winima81.exe
               4 File(s)      2.659.809 bytes
               5 Dir(s)  169.978.023.936 bytes free

c:\OS>setpath

c:\OS>Path=C:\OS\Dev-Cpp\bin;C:\OS\Bochs-2.3.5;c:\OS\Perl;C:\Windows;C:\Windows\System32
c:\OS>cd LAB\LAB1

c:\OS\LAB\LAB1>
```

6. Ketik perintah 'dir' untuk melihat isi folder LAB1


```
c:\OS>dir
 Volume in drive C is WinToHDD
 Volume Serial Number is 7436-E297

 Directory of c:\OS

12/09/2019  16:11    <DIR>          .
12/09/2019  16:11    <DIR>          ..
12/09/2019  16:11    <DIR>          Bochs-2.3.5
12/09/2019  16:11    <DIR>          Dev-Cpp
17/12/2008  00:08         1.096.291 i386.pdf
12/09/2019  16:11    <DIR>          LAB
17/12/2008  00:07           846.920 pcasm-book.pdf
17/12/2008  01:44                86 Setpath.bat
13/12/2008  14:12           716.512 winima81.exe
               4 File(s)      2.659.809 bytes
               5 Dir(s)  169.978.023.936 bytes free

c:\OS>setpath

c:\OS>Path=C:\OS\Dev-Cpp\bin;C:\OS\Bochs-2.3.5;c:\OS\Perl;C:\Windows;C:\Windows\System32
c:\OS>cd LAB\LAB1

c:\OS\LAB\LAB1>dir
 Volume in drive C is WinToHDD
 Volume Serial Number is 7436-E297

 Directory of c:\OS\LAB\LAB1

12/09/2019  16:11    <DIR>          .
12/09/2019  16:11    <DIR>          ..
10/09/2019  16:19            10.235 bochsout.txt
15/12/2008  16:17             1.628 bochsrc.bxrc
14/12/2008  12:02            14.365 boot.asm
07/09/2016  11:20               512 boot.bin
16/09/2015  07:51               512 boots.bin
15/12/2008  00:47                78 dosfp.bat
10/09/2019  15:23         1.474.560 floppya.img
14/12/2008  11:45             7.966 kernel.asm
15/12/2008  16:21               227 Makefile
15/12/2008  12:20                44 s.bat
              10 File(s)      1.510.127 bytes
               2 Dir(s)  169.977.585.664 bytes free

c:\OS\LAB\LAB1>
```

7. Ketik perintah 'del floppya.img' untuk menghapus file floppy.img

```
Command Prompt                                                                              —    □    ×
 Volume in drive C is WinToHDD
 Volume Serial Number is 7436-E297

 Directory of c:\OS

12/09/2019  16:11    <DIR>          .
12/09/2019  16:11    <DIR>          ..
12/09/2019  16:11    <DIR>          Bochs-2.3.5
12/09/2019  16:11    <DIR>          Dev-Cpp
17/12/2008  00:08         1.096.291 i386.pdf
12/09/2019  16:11    <DIR>          LAB
17/12/2008  00:07           846.920 pcasm-book.pdf
17/12/2008  01:44                86 Setpath.bat
13/12/2008  14:12           716.512 winima81.exe
               4 File(s)      2.659.809 bytes
               5 Dir(s)  169.978.023.936 bytes free

c:\OS>setpath

c:\OS>Path=C:\OS\Dev-Cpp\bin;C:\OS\Bochs-2.3.5;c:\OS\Perl;C:\Windows;C:\Windows\System32
c:\OS>cd LAB\LAB1

c:\OS\LAB\LAB1>dir
 Volume in drive C is WinToHDD
 Volume Serial Number is 7436-E297

 Directory of c:\OS\LAB\LAB1

12/09/2019  16:11    <DIR>          .
12/09/2019  16:11    <DIR>          ..
10/09/2019  16:19            10.235 bochsout.txt
15/12/2008  16:17             1.628 bochsrc.bxrc
14/12/2008  12:02            14.365 boot.asm
07/09/2016  11:20               512 boot.bin
16/09/2015  07:51               512 boots.bin
15/12/2008  00:47                78 dosfp.bat
10/09/2019  15:23         1.474.560 floppya.img
14/12/2008  11:45             7.966 kernel.asm
15/12/2008  16:21               227 Makefile
15/12/2008  12:20                44 s.bat
              10 File(s)      1.510.127 bytes
               2 Dir(s)  169.977.585.664 bytes free

c:\OS\LAB\LAB1>del floppya.img

c:\OS\LAB\LAB1>
```

8. Untuk melakukan kompilasi source code program 'boot.asm' dengan perintah 'make fp.disk' lalu akan muncul output boot.bin yang isinya disalin ke floppy.img

```
Command Prompt                                                                              —    □    ×
17/12/2008  00:08         1.096.291 i386.pdf
12/09/2019  16:11    <DIR>          LAB
17/12/2008  00:07           846.920 pcasm-book.pdf
17/12/2008  01:44                86 Setpath.bat
13/12/2008  14:12           716.512 winima81.exe
               4 File(s)      2.659.809 bytes
               5 Dir(s)  169.978.023.936 bytes free

c:\OS>setpath

c:\OS>Path=C:\OS\Dev-Cpp\bin;C:\OS\Bochs-2.3.5;c:\OS\Perl;C:\Windows;C:\Windows\System32
c:\OS>cd LAB\LAB1

c:\OS\LAB\LAB1>dir
 Volume in drive C is WinToHDD
 Volume Serial Number is 7436-E297

 Directory of c:\OS\LAB\LAB1

12/09/2019  16:11    <DIR>          .
12/09/2019  16:11    <DIR>          ..
10/09/2019  16:19            10.235 bochsout.txt
15/12/2008  16:17             1.628 bochsrc.bxrc
14/12/2008  12:02            14.365 boot.asm
07/09/2016  11:20               512 boot.bin
16/09/2015  07:51               512 boots.bin
15/12/2008  00:47                78 dosfp.bat
10/09/2019  15:23         1.474.560 floppya.img
14/12/2008  11:45             7.966 kernel.asm
15/12/2008  16:21               227 Makefile
15/12/2008  12:20                44 s.bat
              10 File(s)      1.510.127 bytes
               2 Dir(s)  169.977.585.664 bytes free

c:\OS\LAB\LAB1>del floppya.img

c:\OS\LAB\LAB1>make fp.disk
nasm boot.asm -o boot.bin -f bin
dd if=boot.bin of=floppya.img
rawwrite dd for windows version 0.5.
Written by John Newbigin <jn@it.swin.edu.au>
This program is covered by the GPL.  See copying.txt for details
1+0 records in
1+0 records out

c:\OS\LAB\LAB1>
```

9. Ketik perintah 'bximage' untuk membuat file floppy.img baru

10. Ketik 'fd' untuk memilih type file fd karena yang lebih kecil

11. Pilih type flppy dengan kapasitas 1.44 MB dengan mengetik '1.44'

12. Ketik 'floppya.img' untuk memberi nama image

13. Ketik perintah 'yes' untuk me-replace floppya.img lama dengan yang baru

14. Jalankan PC-Simulator dengan mengetik perintah 'dosfp'

15. Ketik 'Format B:' setelah format selesai klik enter
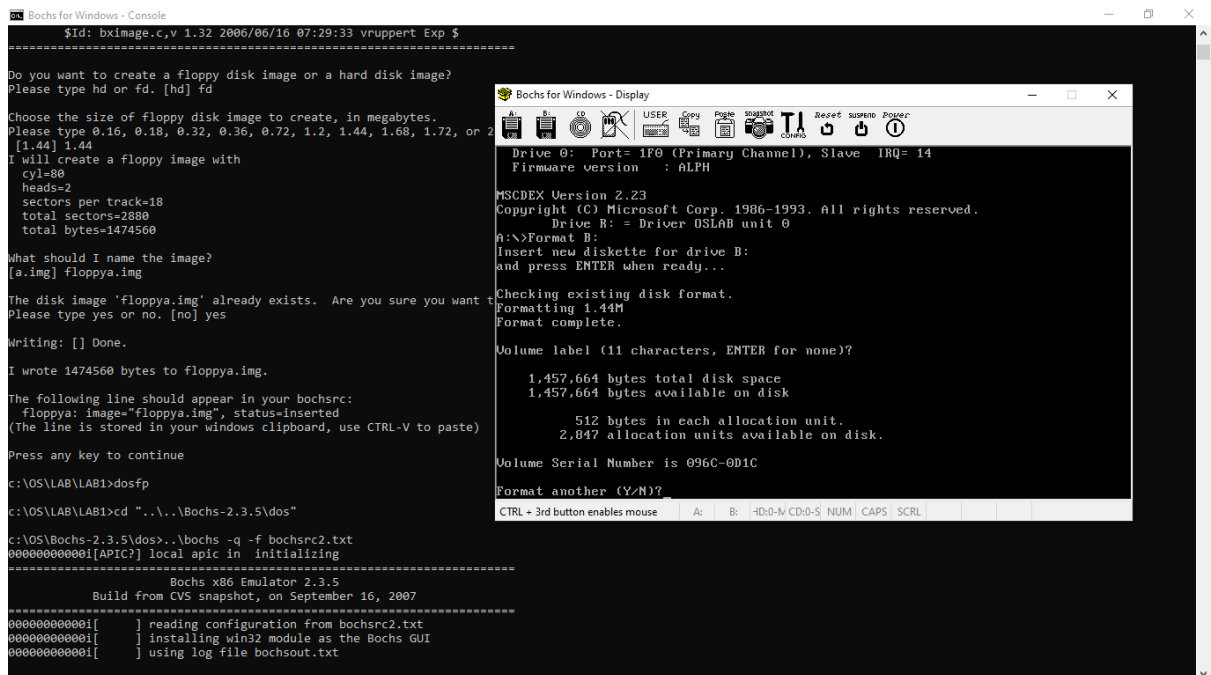
16. Tutup kembali dengan mengetik 'n' lalu tutup simulator dengan mengklik tombol power
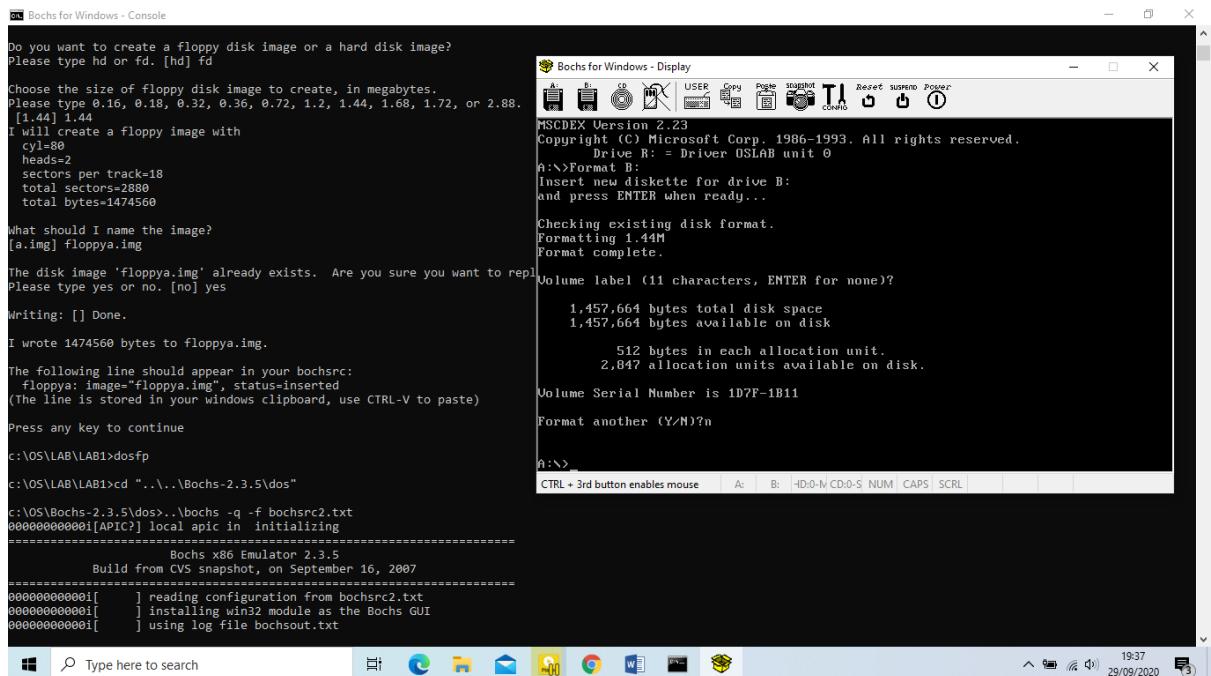
17. Ketik 'tdump boots.bin' untuk memindah data

18. Ketik perintah 's' untuk membuka simulator, kemudian tutup dengan tombol power

19. Boot invalid karena floppy.img belum diisi system file atau kernel, kemudian ketik perintah 'del floppy.img',untuk membuat img baru dengan perintah 'bximage' lalu pilih type fd dan ukuran 1.44 MB. Lalu beri nama 'floppy.img'

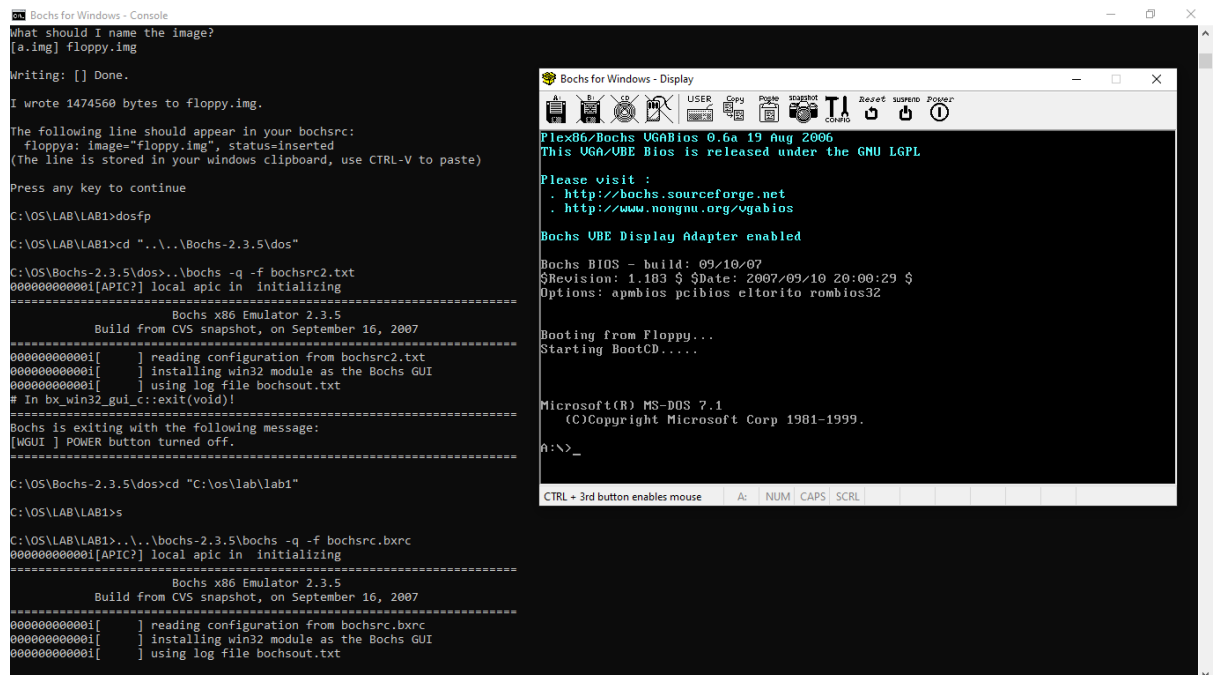20. Buka simulator dengan ketik 'dosfp' lalu masukkan perintah 'Format B:/S', (enter)

21. Ketik 'y', (enter) untuk menformat lagi
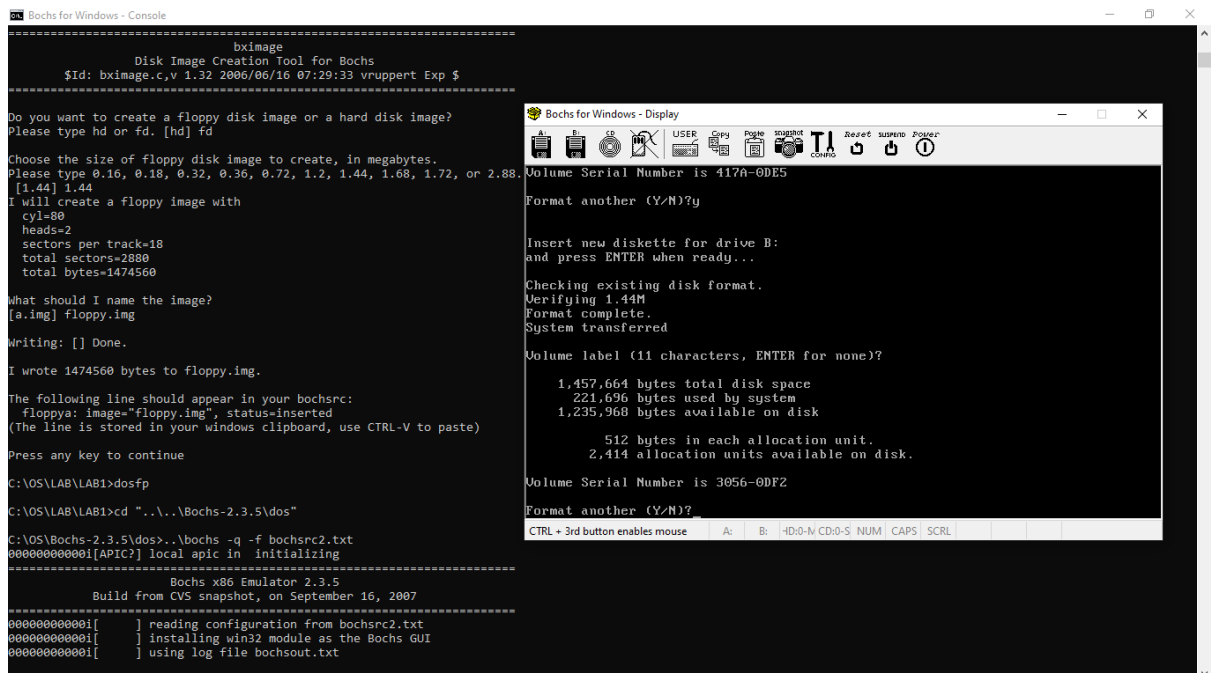
22. karena format selesai, lalu ketik 'n', untuk mengecek bahwa floppy.img telah terisi system file ketik 'dir B:' lalu klik tombol power off.
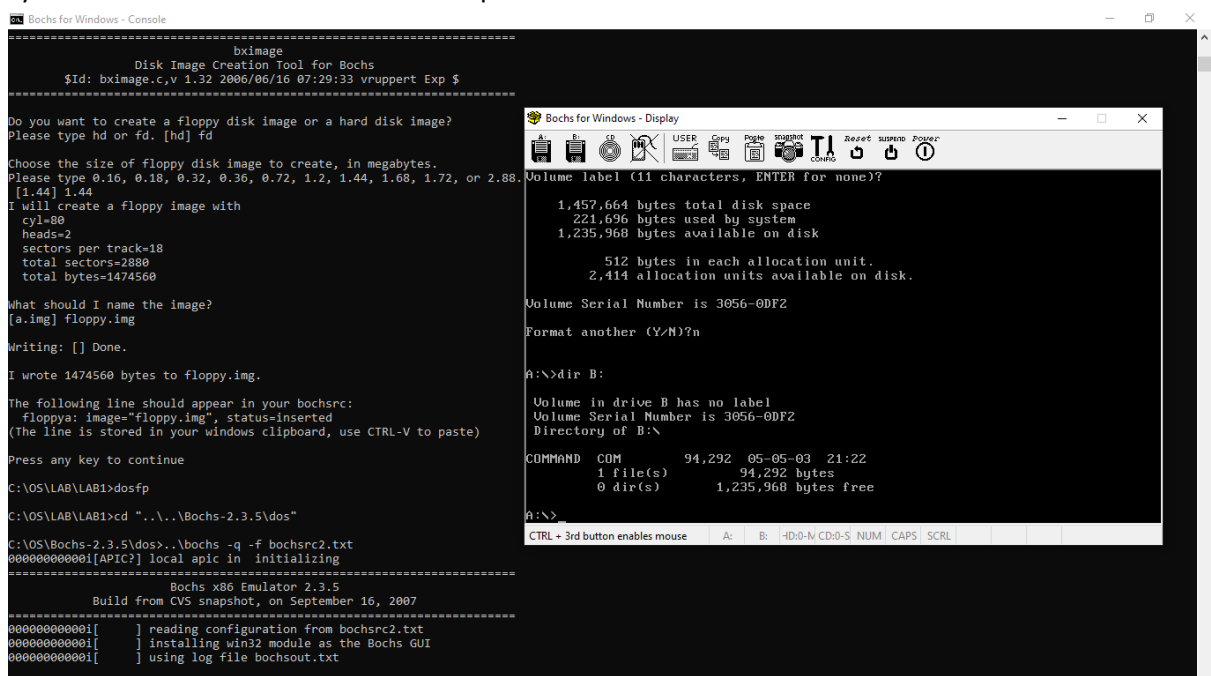
23. sekarang mencoba menggunakan floppy.img sebagai boot.disk dengan perintah 's'

24. Selesai.