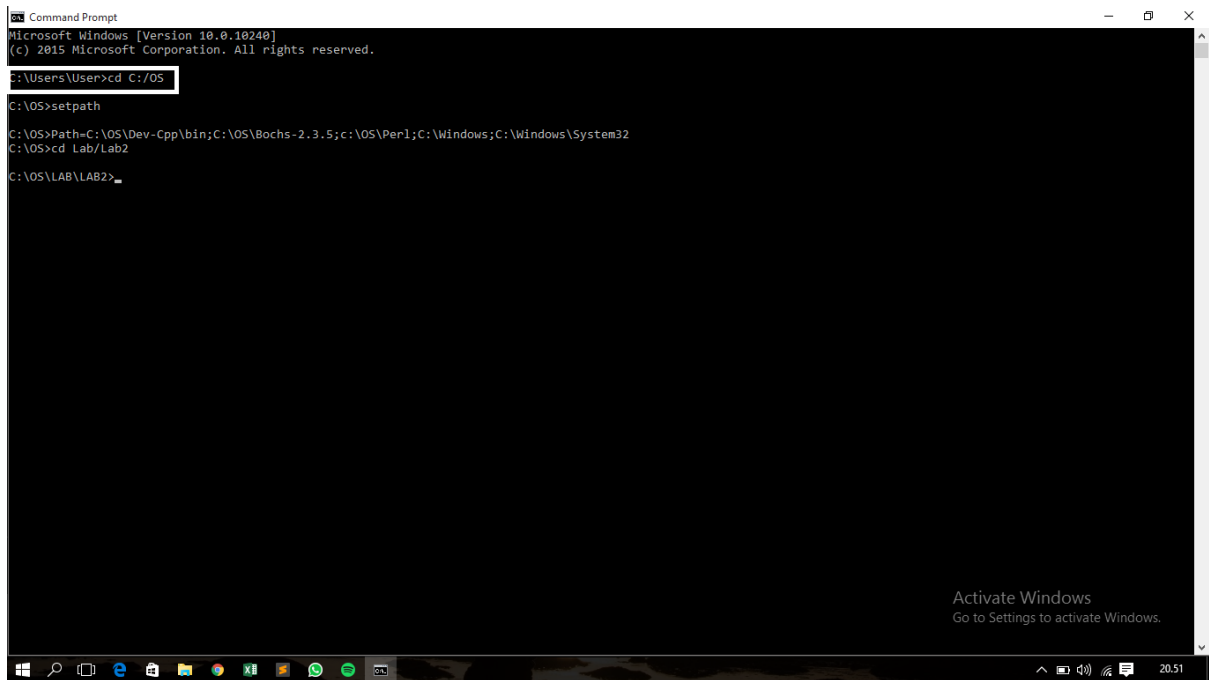


Nama : Salsa Sasmita Mukti

NIM : L200183070

Kelas : X

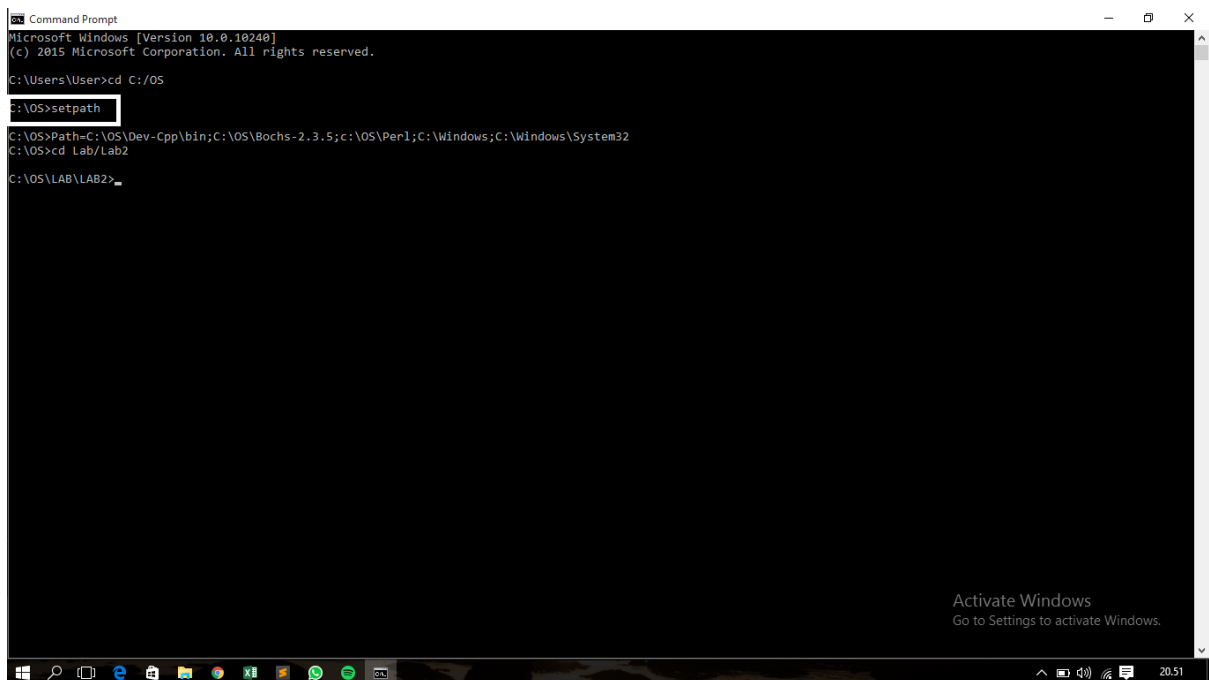
1. Masuk ke direktori C:/OS dan melakukan setpath, kemudia masuk ke dorektori lab/lab2. Kemudia lakukan dir untuk mengecek isi dari direktori



```
Microsoft Windows [Version 10.0.10240]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\Users\User>cd C:/OS
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/Lab2
C:\OS\LAB\LAB2>
```

Activate Windows
Go to Settings to activate Windows.



```
Microsoft Windows [Version 10.0.10240]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\Users\User>cd C:/OS
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/Lab2
C:\OS\LAB\LAB2>
```

Activate Windows
Go to Settings to activate Windows.

```
Command Prompt
Microsoft Windows [Version 10.0.10240]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\Users\User>cd C:/OS
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/Lab2
C:\OS\LAB\LAB2>
```

2. Kemudian buat suatu file bernama “floppya.img”, dengan bantuan aplikasi bxiimage

```
C:\Windows\system32\cmd.exe
21/09/2018 20:53 1.474.560 floppya.img
19/09/2018 12:09 7.966 kernel.asm
08/09/2016 20:36 604 kernel.bin
15/12/2008 23:21 228 Makefile
15/12/2008 19:20 44 s.bat
12 File(s) 1.872.117 bytes
2 Dir(s) 87.873.486.848 bytes free

C:\OS\LAB\LAB2>del floppya.img
C:\OS\LAB\LAB2>bxiimage
-----
bximage
Disk Image Creation Tool for Bochs
$Id: bxiimage.c,v 1.32 2006/06/16 07:29:33 vruppert Exp $
-----

Do you want to create a floppy disk image or a hard disk image?
Please type hd or fd. [hd] fd

Choose the size of floppy disk image to create, in megabytes.
Please type 0.16, 0.18, 0.32, 0.36, 0.72, 1.2, 1.44, 1.68, 1.72, or 2.88.
[1.44]

I will create a floppy image with
cyl=80
heads=2
sectors per track=18
total sectors=2880
total bytes=1474560

What should I name the image?
[a.img] floppya.img

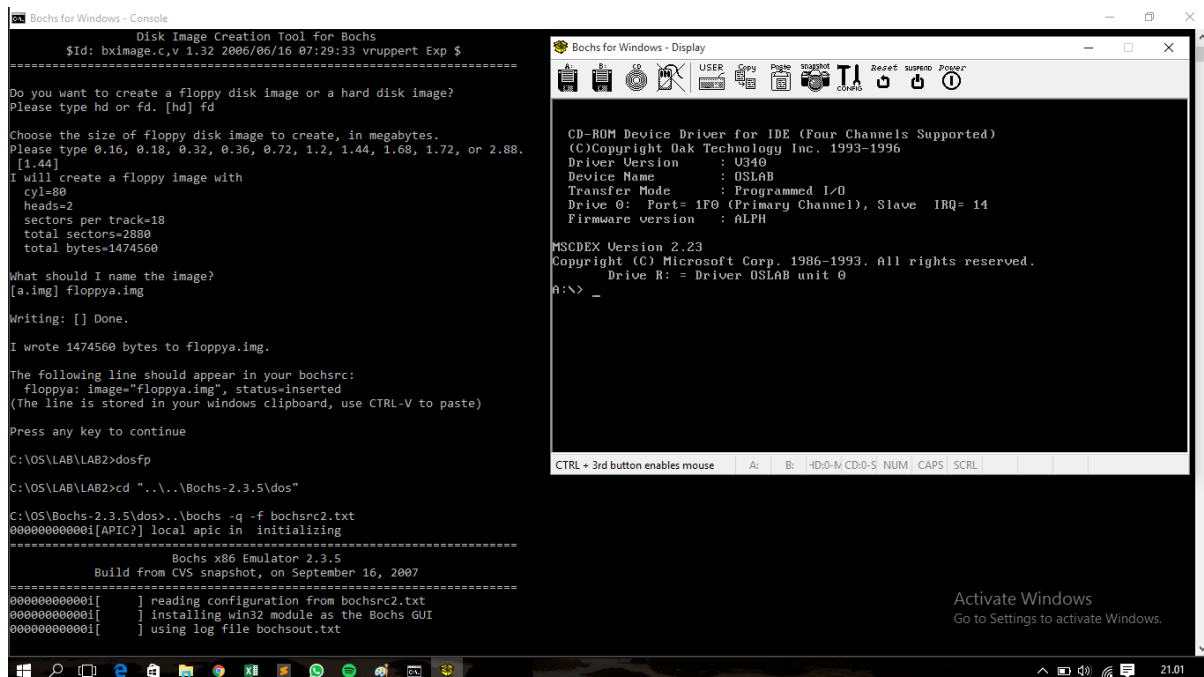
Writing: [] Done.

I wrote 1474560 bytes to floppya.img.

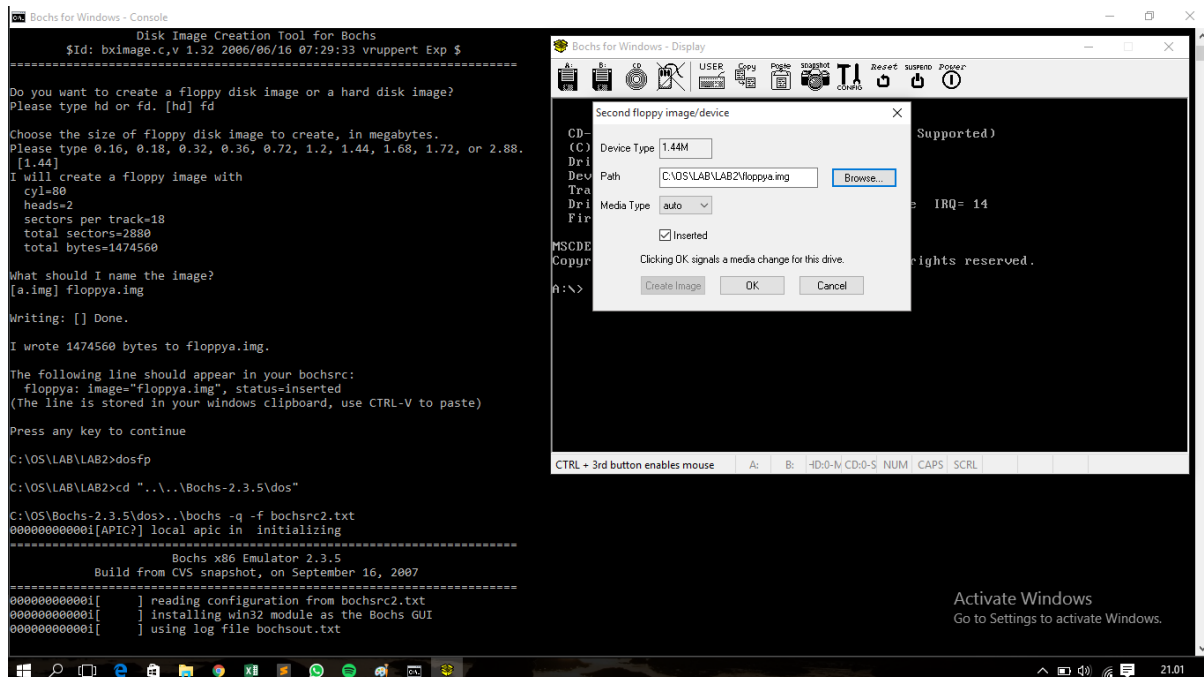
The following line should appear in your bochsrc:
floppya: image="floppya.img", status=inserted
(The line is stored in your windows clipboard, use CTRL-V to paste)

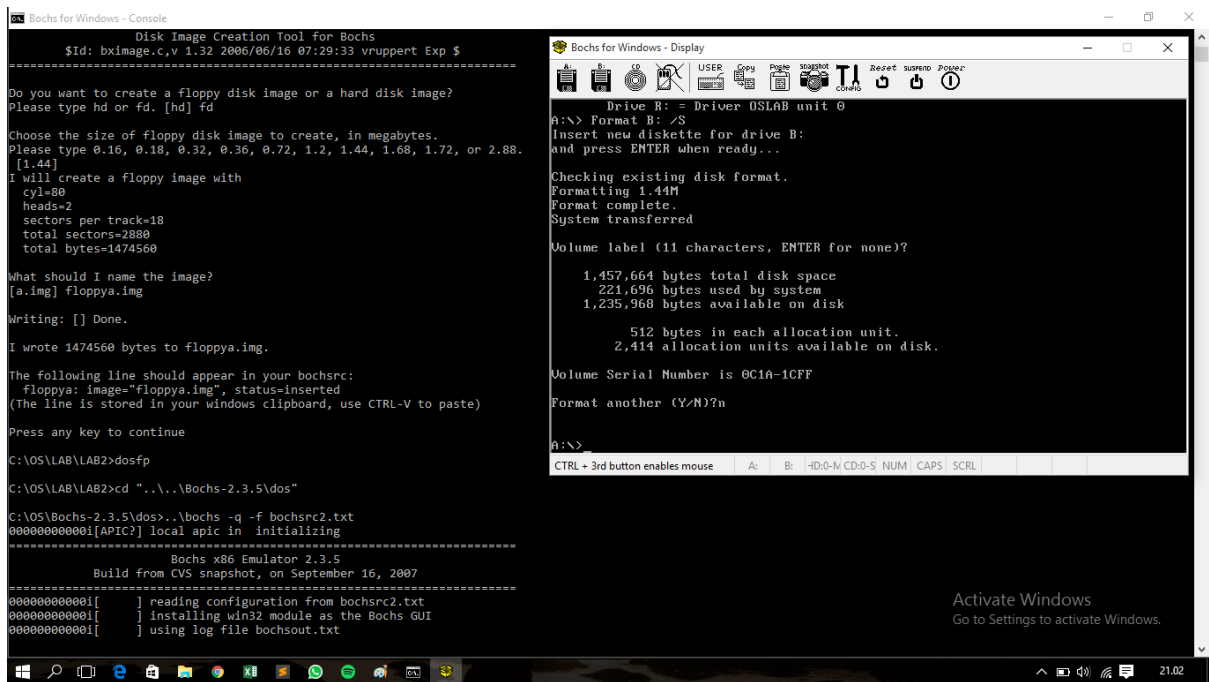
Press any key to continue
C:\OS\LAB\LAB2>
```

3. Kemudian format floppy.a.img dengan mengisi DOS ke dalamnya

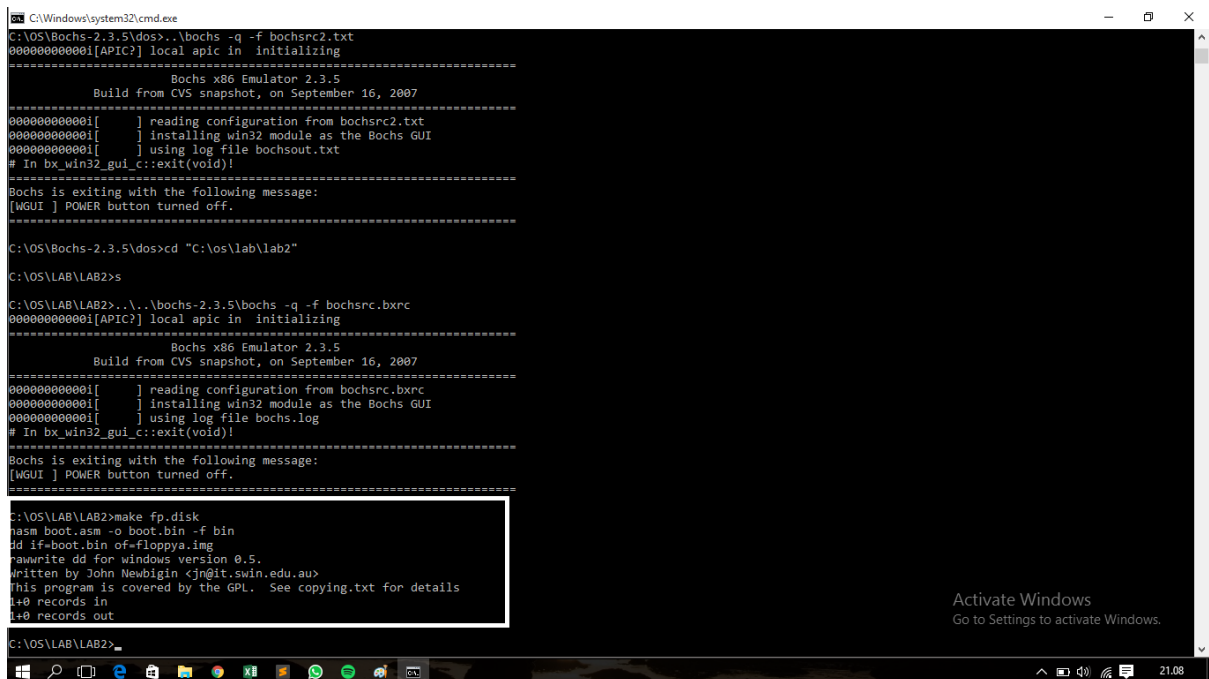


4. Atur lokasi floppy.a.img yang ada dalam folder lab2. Kemudian lakukan pemformatan.

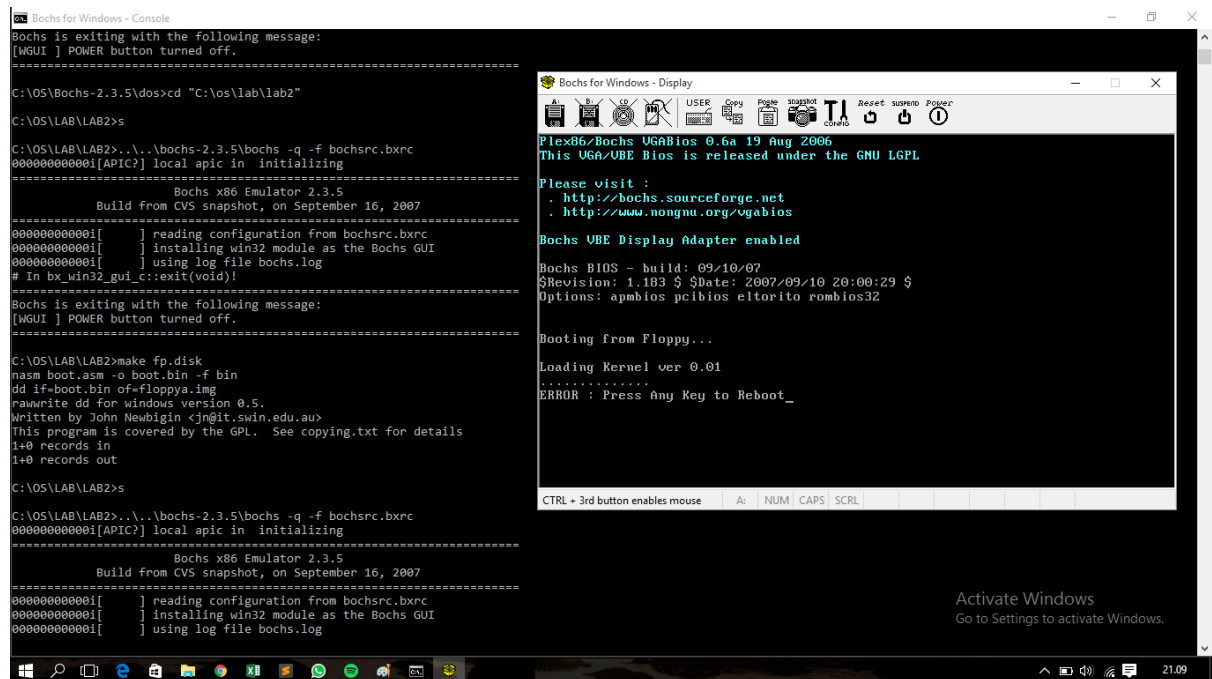




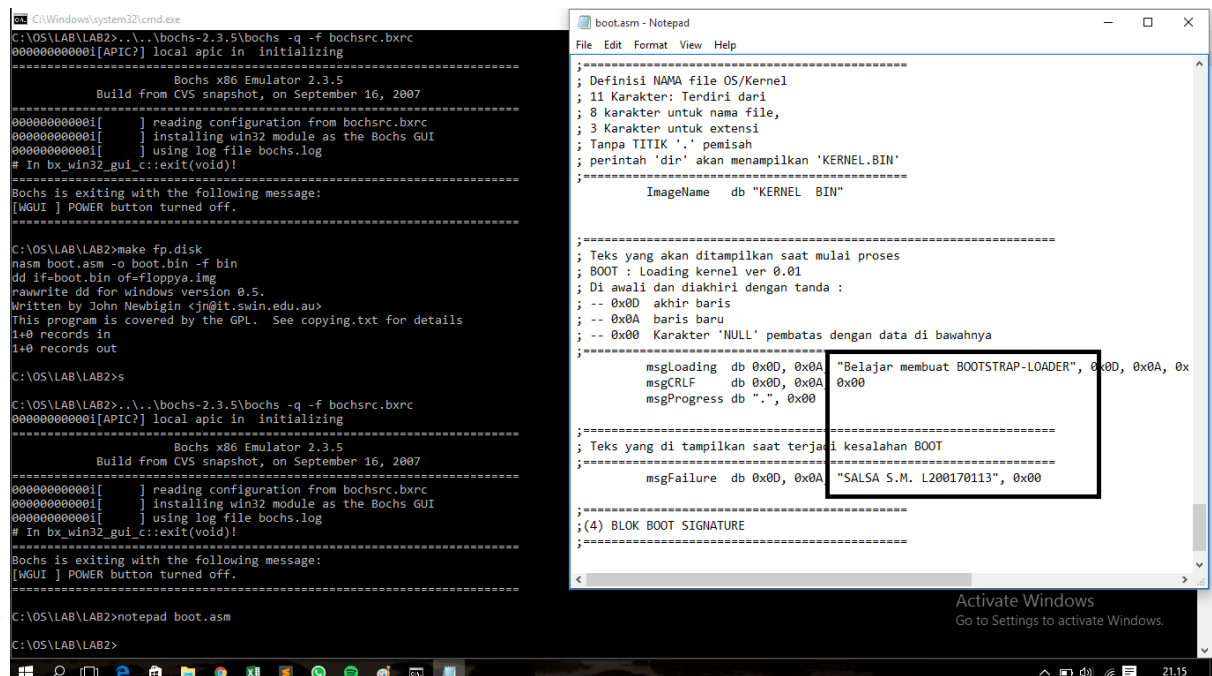
5. Memasukkan source code dari boot.asm ke bootsector “floppya.img”. Kemudian jalankan perintah make fp.disk

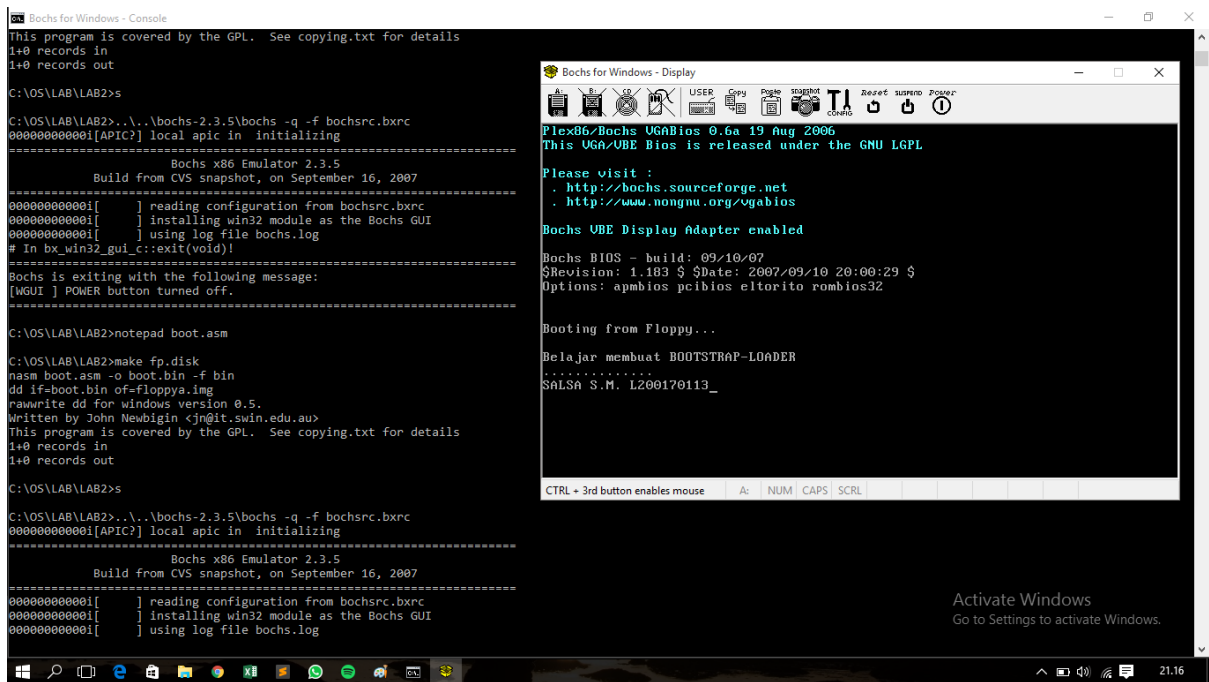


6. Lalu ketikkan 'S'

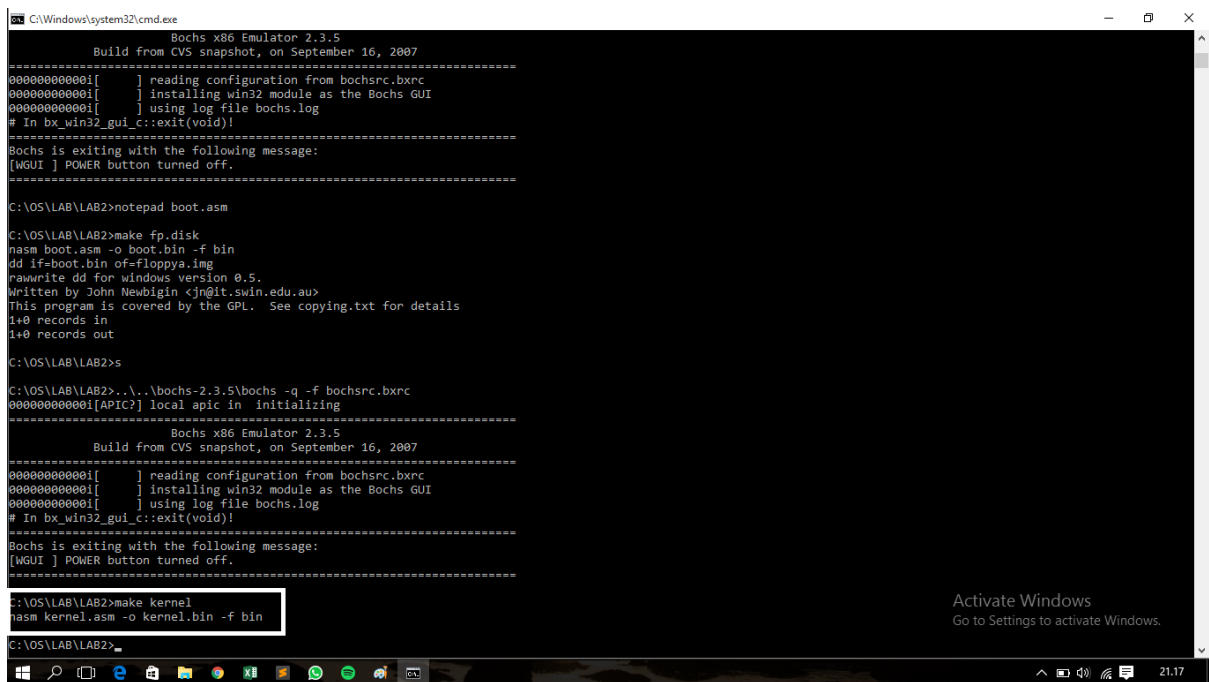


7. Selanjutnya suntukng boot.asm dengan mengetikkan 'notepad boot.asm' di mana membuka file boot.asm dengan menggunakan notepad. Kemudian ganti msgLoading sesuai perintah. Dan ganti error dengan nama dan nim.





8. Ketikkan make kernel. Kemudian cek apakah sudah ada file baru bernama “kernel.bin”



```
C:\Windows\system32\cmd.exe
C:\OS\LAB\LAB2>s

C:\OS\LAB\LAB2>..\..\bochs-2.3.5\bochs -q -f bochsrc.bxrc
00000000000i[APIC?] local apic in  initializing
=====
Bochs x86 Emulator 2.3.5
Build from CVS snapshot, on September 16, 2007
=====
00000000000i[      ] reading configuration from bochsrc.bxrc
00000000000i[      ] installing win32 module as the Bochs GUI
00000000000i[      ] using log file bochs.log
# In bx_win32_gui_c::exit(void)!
=====
Bochs is exiting with the following message:
[WGUI ] POWER button turned off.
=====

C:\OS\LAB\LAB2>make kernel
nasm kernel.asm -o kernel.bin -f bin

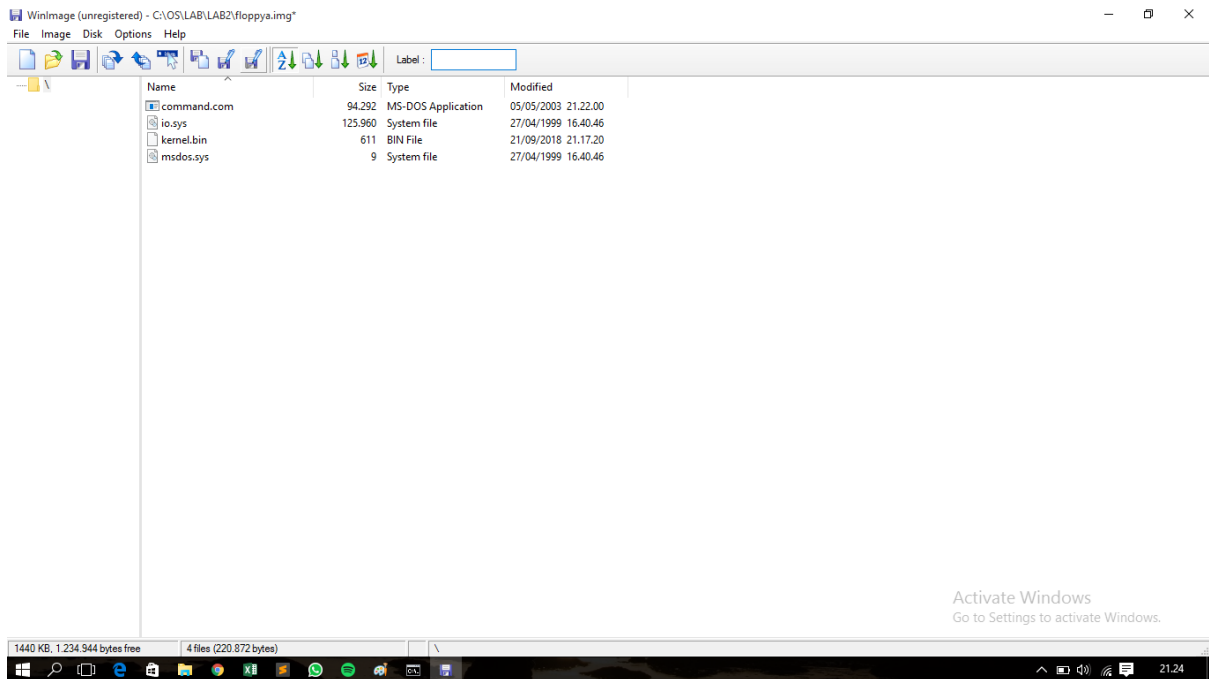
C:\OS\LAB\LAB2>dir
Volume in drive C is System
Volume Serial Number is 4A6B-68E6

Directory of C:\OS\LAB\LAB2

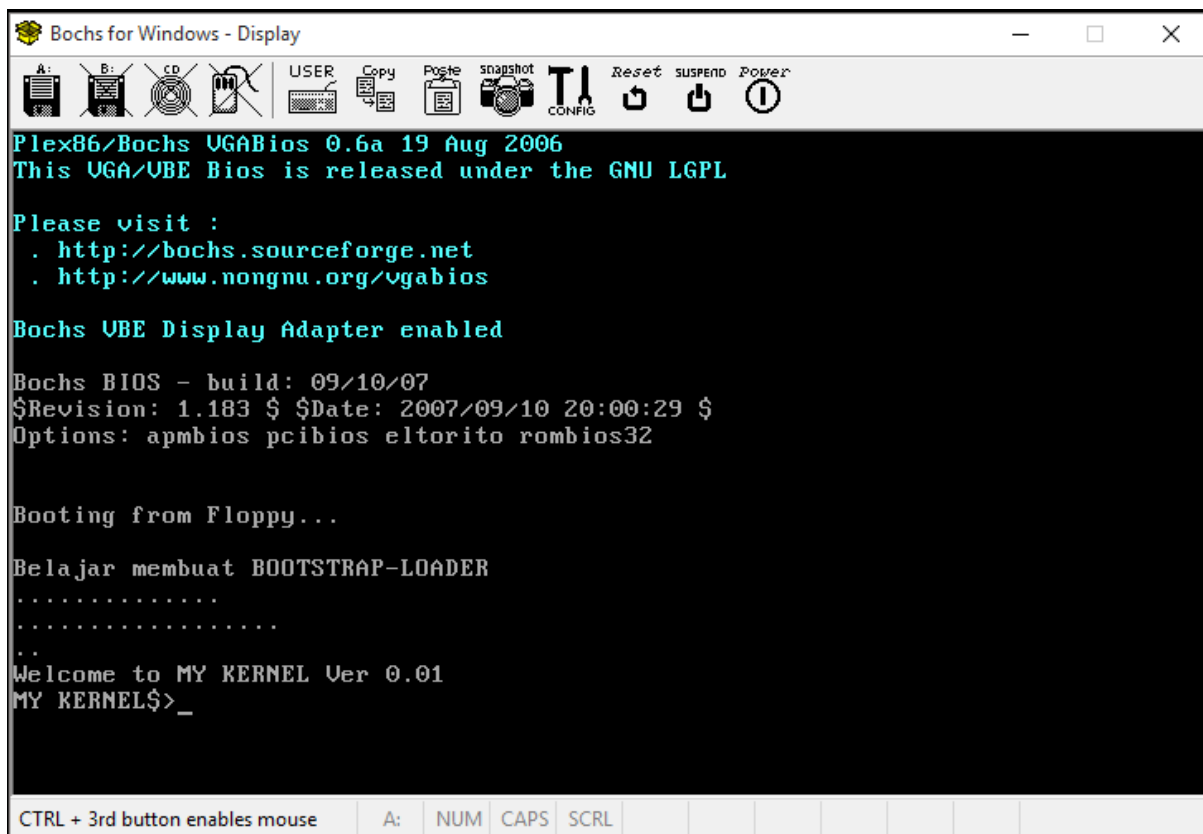
21/09/2018  20.54  <DIR>          .
21/09/2018  20.54  <DIR>          ..
21/09/2018  21.17                10.153 bochsrc.log
15/12/2008  23.18                1.625 bochsrc.bxrc
21/09/2018  21.16                15.921 boot.asm
21/09/2018  21.16                512 boot.bin
16/09/2007  23.22                18.432 bximage.exe
27/02/2007  03.50                342.016 dd.exe
15/12/2008  20.52                78 dosfp.bat
21/09/2018  21.16            1,474,560 floppy.a.img
19/09/2018  12.09                7,966 kernel.asm
21/09/2018  21.17                611 kernel.bin
15/12/2008  23.21                44 s.bat
15/12/2008  19.20                12 File(s)    1,872,146 bytes
                        2 Dir(s)    87,871,979,520 bytes free

C:\OS\LAB\LAB2>
```

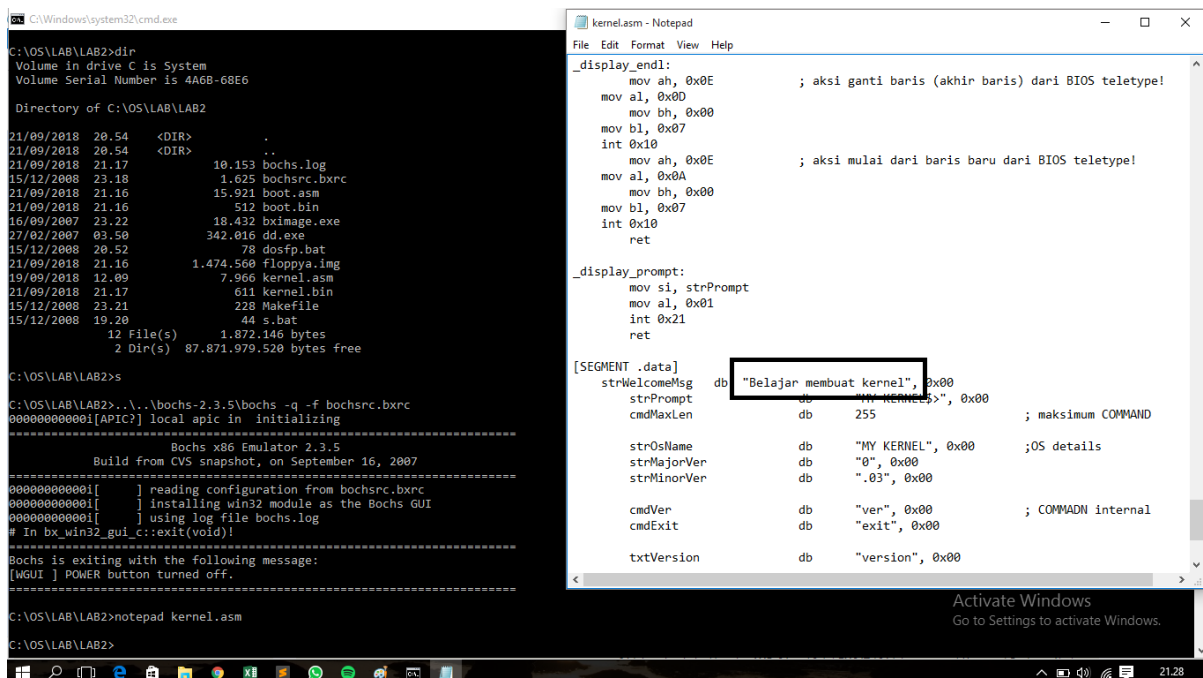
9. Memasukkan file kernel.bin ke dalam file floppy.a.img



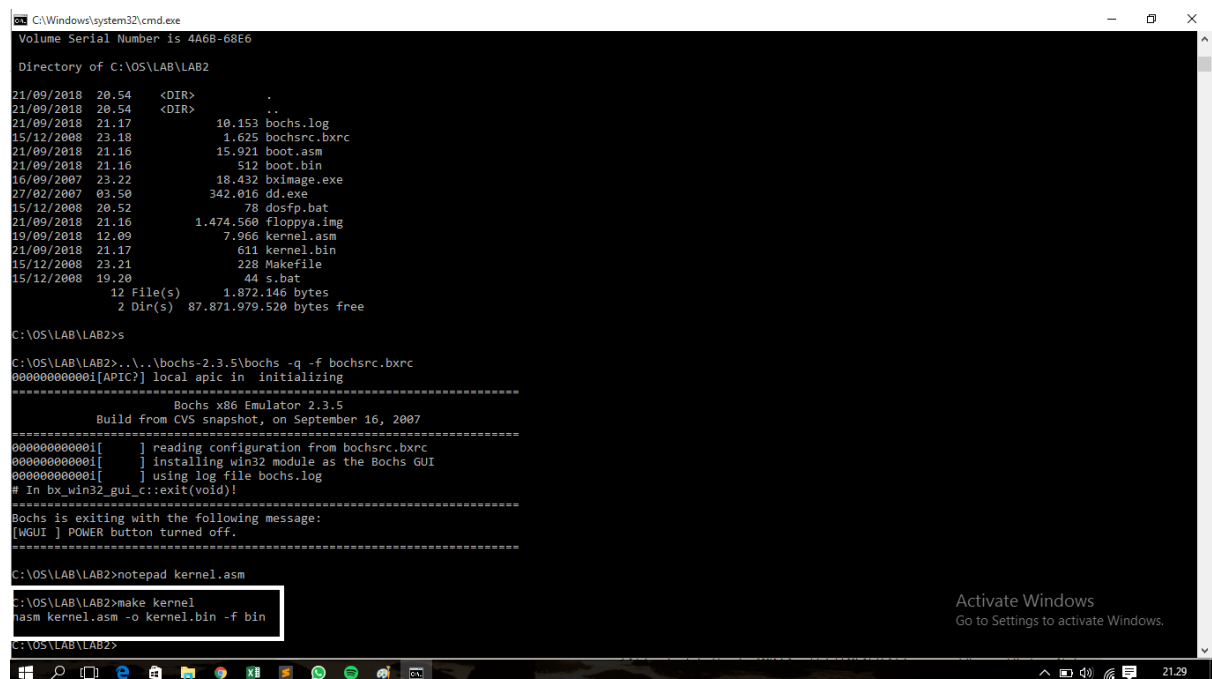
10. Cek dengan "S"



11. Modifikasi file kernel.asm. Ganti strWelcomeMsg sesuai perintah.



11. Kemudian make kernel kembali untuk merefresh.



```
C:\Windows\system32\cmd.exe
Volume Serial Number is 4A6B-68E6

Directory of C:\OS\LAB\LAB2

21/09/2018  20:54    <DIR>          .
21/09/2018  20:54    <DIR>          ..
21/09/2018  21:17                10,153 bochs.log
15/12/2008  23:18                1,625 bochsrc.bxrc
21/09/2018  21:16                15,921 boot.asm
21/09/2018  21:16                512 boot.bin
16/09/2007  23:22            18,432 bximage.exe
27/02/2007  03:50            342,016 dd.exe
15/12/2008  20:52                78 dosfp.bat
21/09/2018  21:16            1,474,560 floppy2.img
19/09/2018  12:09                7,966 kernel.asm
21/09/2018  21:17                611 kernel.bin
15/12/2008  23:21                228 Makefile
15/12/2008  19:20                44 s.bat
               12 File(s)      1,872,146 bytes
               2 Dir(s)      87,871,979,520 bytes free

C:\OS\LAB\LAB2>s

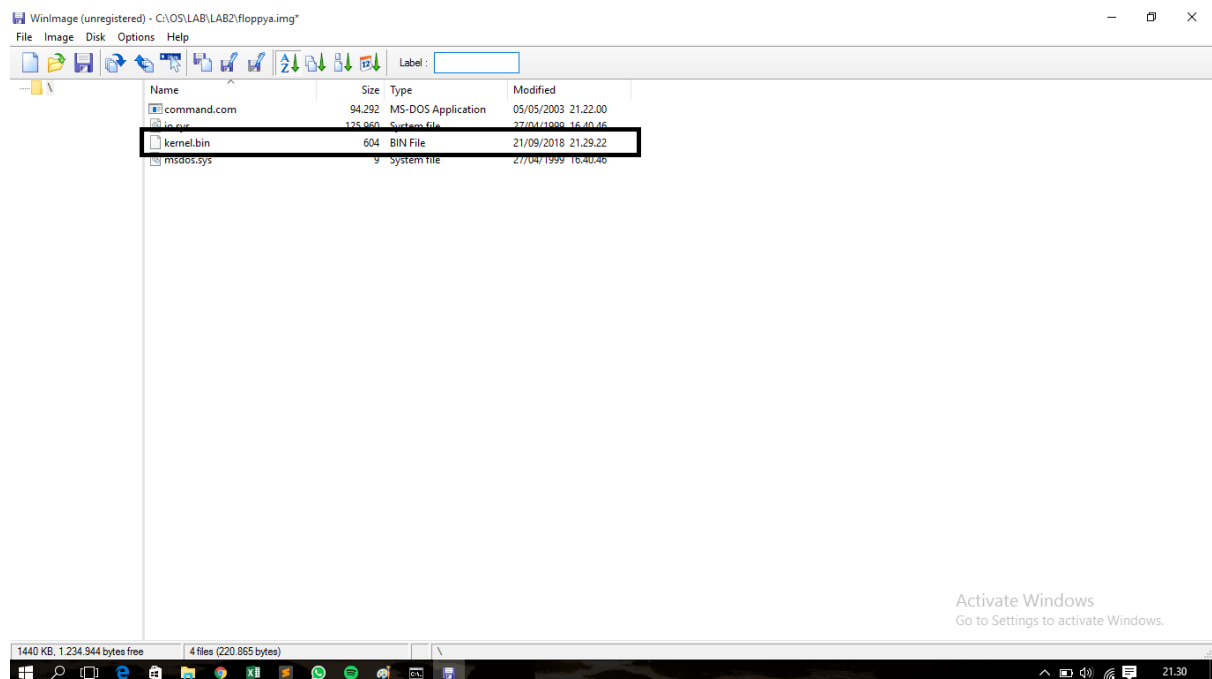
C:\OS\LAB\LAB2>..\..\bochs-2.3.5\bochs -q -f bochsrc.bxrc
00000000000i[APIC?] local apic in  initializing
=====
Bochs x86 Emulator 2.3.5
Build from CVS snapshot, on September 16, 2007
=====
00000000000i[ ] reading configuration from bochsrc.bxrc
00000000000i[ ] installing win32 module as the Bochs GUI
00000000000i[ ] using log file bochs.log
# In bx_win32_gui_c::exit(void)!
=====
Bochs is exiting with the following message:
[!GUI ] POWER button turned off.
=====

C:\OS\LAB\LAB2>notepad kernel.asm

C:\OS\LAB\LAB2>make kernel
nasm kernel.asm -o kernel.bin -f bin

C:\OS\LAB\LAB2>
```

12. Dan masukkan kembali kernel yang telah diperbaharui.



13. Kemudian cek dengan mengetikkan “S”

