Lembar Kerja Praktikum 2

NIM   : L200170054

Nama : Rizky Tri Setya W
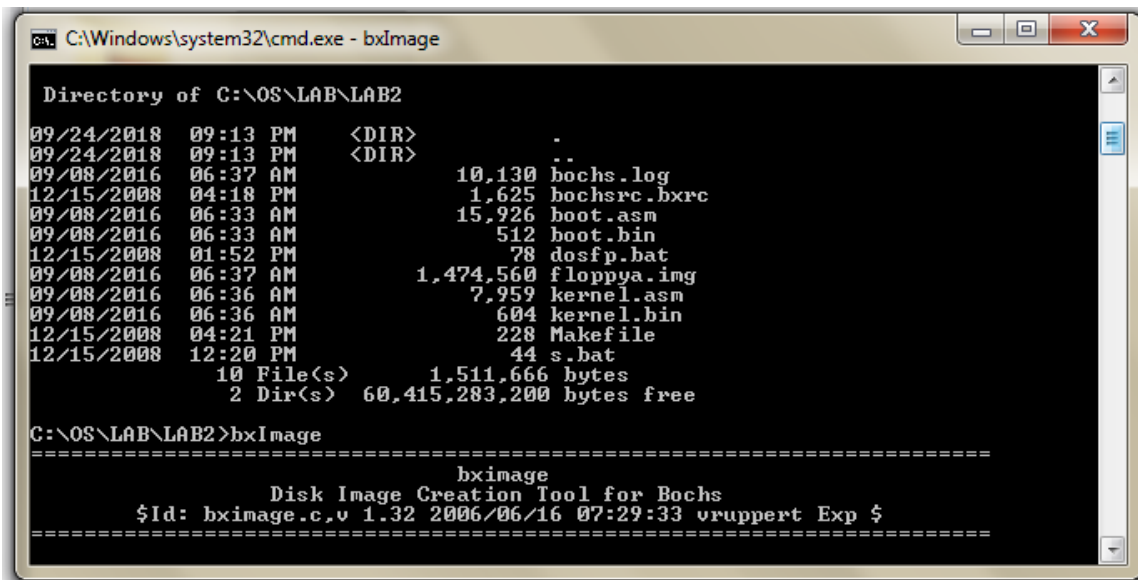
(1)

(2)


```
C:\Windows\system32\cmd.exe                                    _ □ X

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] 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

The disk image 'floppya.img' already exists.  Are you sure you want to replace i
t?
Please type yes or no. [no] no
ERROR: Aborted

Press any key to continue

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



```
C:\Windows\system32\cmd.exe                                    _ □ X

Press any key to continue

C:\OS\LAB\LAB2>dir
 Volume in drive C has no label.
 Volume Serial Number is 0A7E-DD47

 Directory of C:\OS\LAB\LAB2

09/24/2018  09:13 PM    <DIR>          .
09/24/2018  09:13 PM    <DIR>          ..
09/08/2016  06:37 AM            10,130 bochs.log
12/15/2008  04:18 PM             1,625 bochsrc.bxrc
09/08/2016  06:33 AM            15,926 boot.asm
09/08/2016  06:33 AM               512 boot.bin
12/15/2008  01:52 PM                78 dosfp.bat
09/08/2016  06:37 AM         1,474,560 floppya.img
09/08/2016  06:36 AM             7,959 kernel.asm
09/08/2016  06:36 AM               604 kernel.bin
12/15/2008  04:21 PM               228 Makefile
12/15/2008  12:20 PM                44 s.bat
              10 File(s)      1,511,666 bytes
               2 Dir(s)  60,414,230,528 bytes free

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

(3)
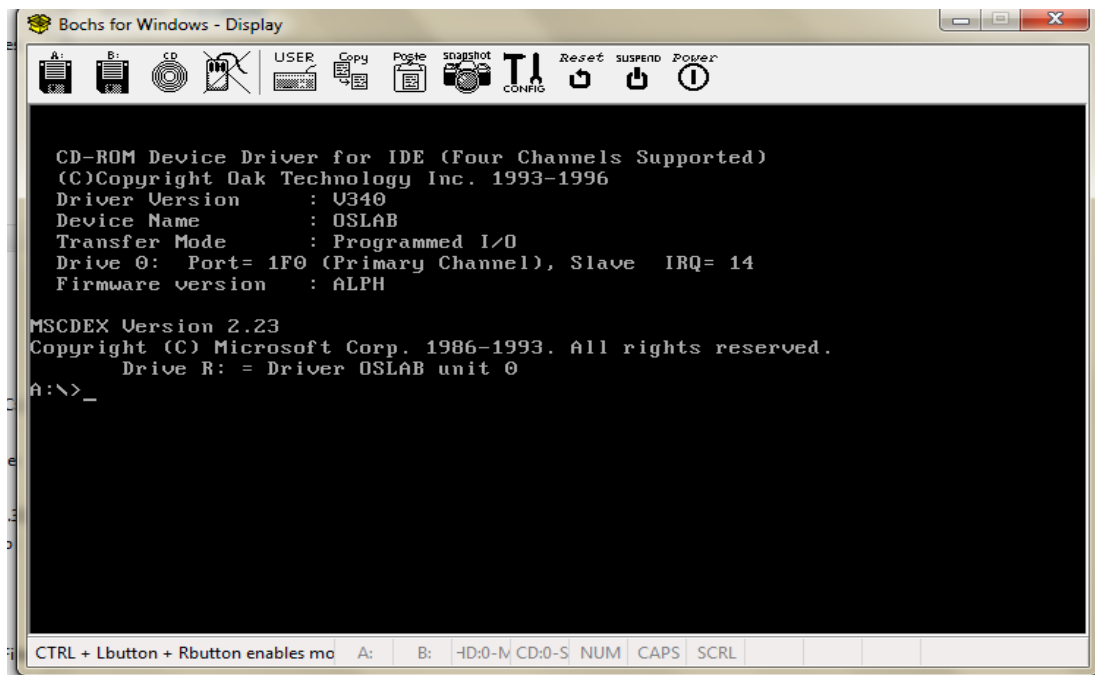
(4)
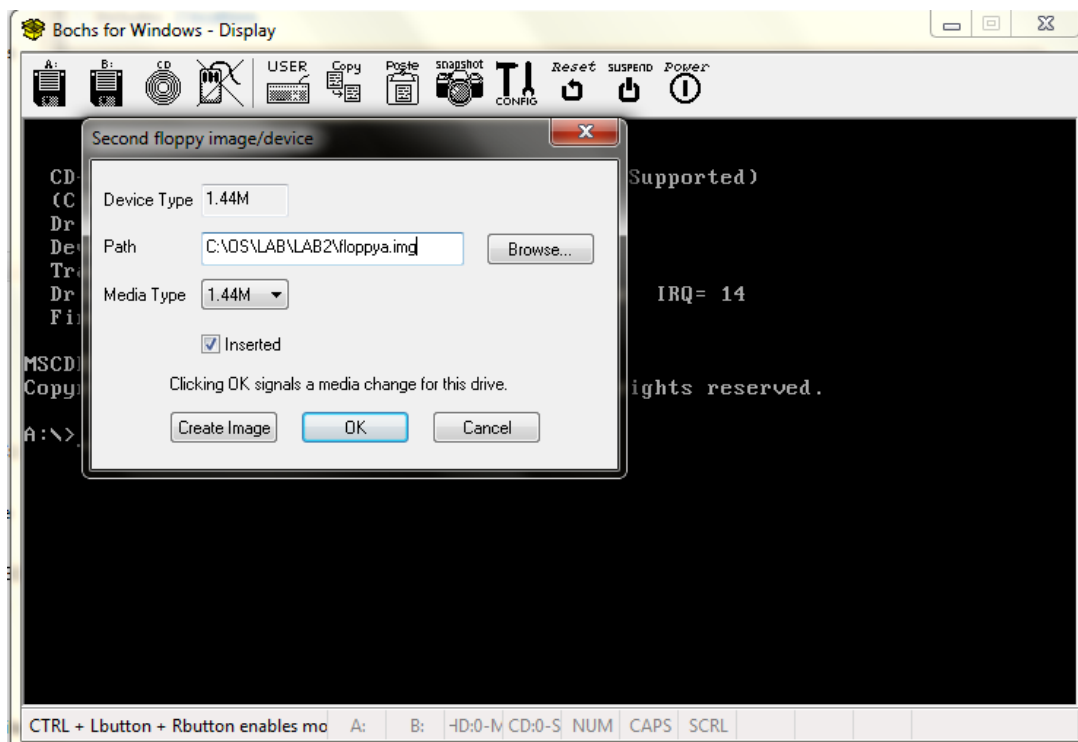
(5)

```
C:\Windows\system32\cmd.exe
                10 File(s)      1,511,666 bytes
                 2 Dir(s)  60,414,230,528 bytes free

C:\OS\LAB\LAB2>dosfp

C:\OS\LAB\LAB2>cd "..\..\Bochs-2.3.5\dos"

C:\OS\Bochs-2.3.5\dos>..\bochs -q -f bochsrc2.txt
00000000000i[APIC?] local apic in  initializing
========================================================================
                Bochs x86 Emulator 2.3.5
          Build from CVS snapshot, on September 16, 2007
========================================================================
00000000000i[      ] reading configuration from bochsrc2.txt
00000000000i[      ] installing win32 module as the Bochs GUI
00000000000i[      ] using log file bochsout.txt
# In bx_win32_gui_c::exit(void)!
========================================================================
Bochs is exiting with the following message:
[WGUI ] POWER button turned off.
========================================================================

C:\OS\Bochs-2.3.5\dos>cd "C:\os\lab\lab2"

C:\OS\LAB\LAB2>
```
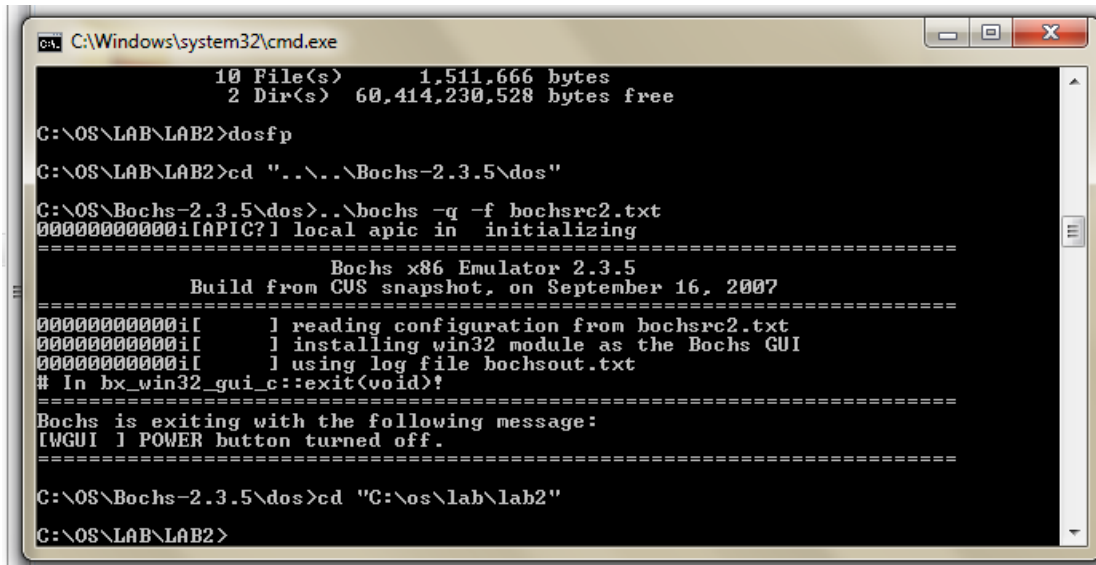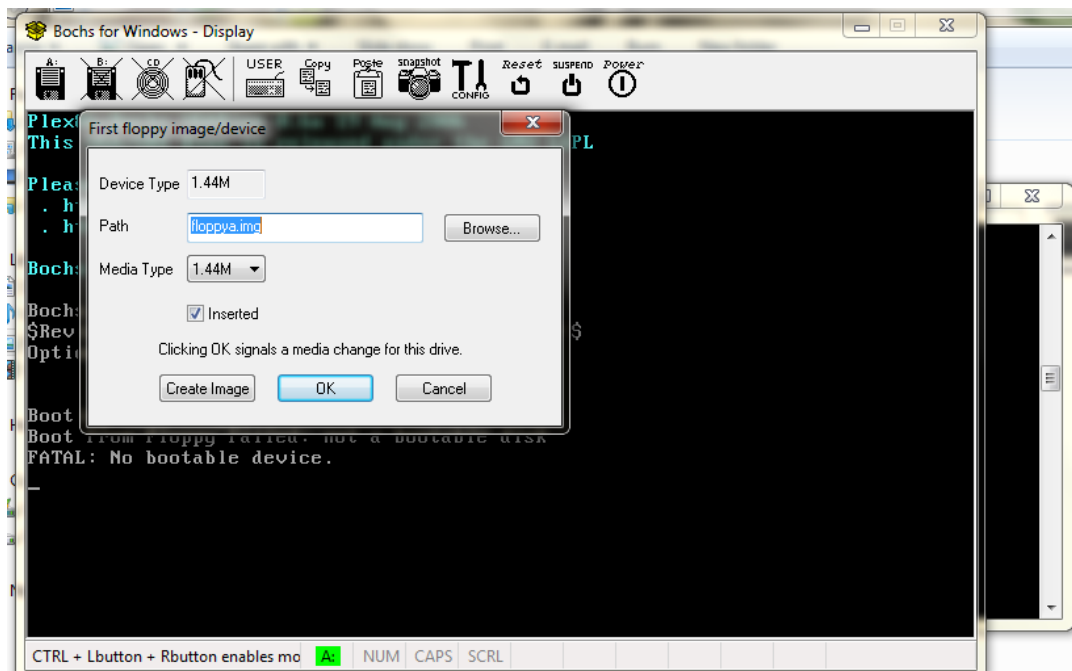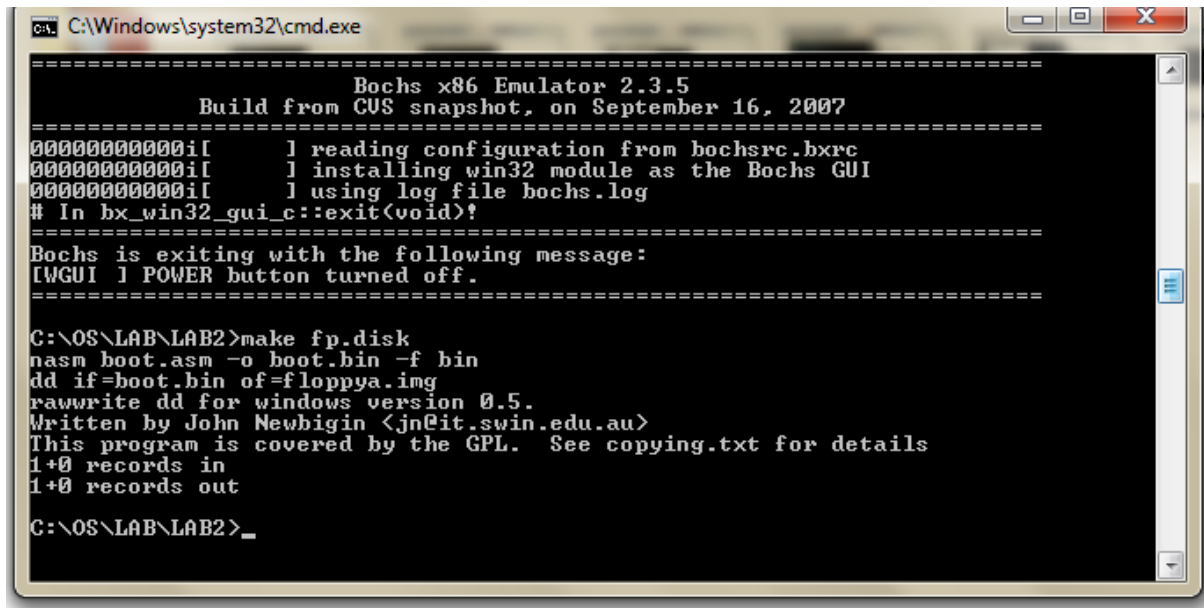
(6)
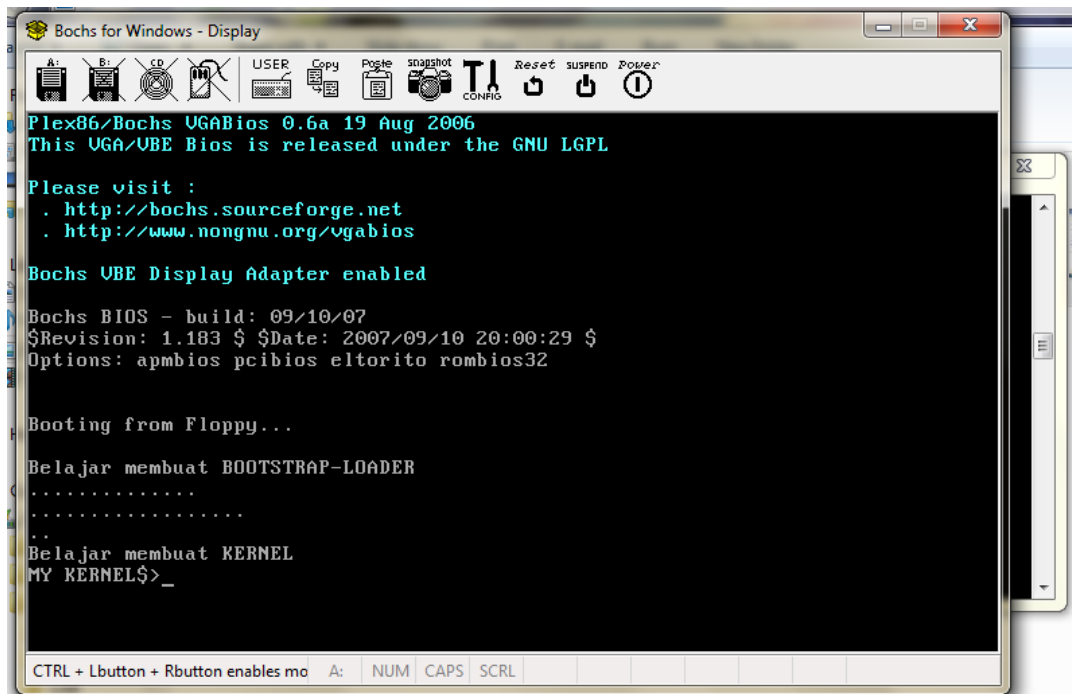
(7)
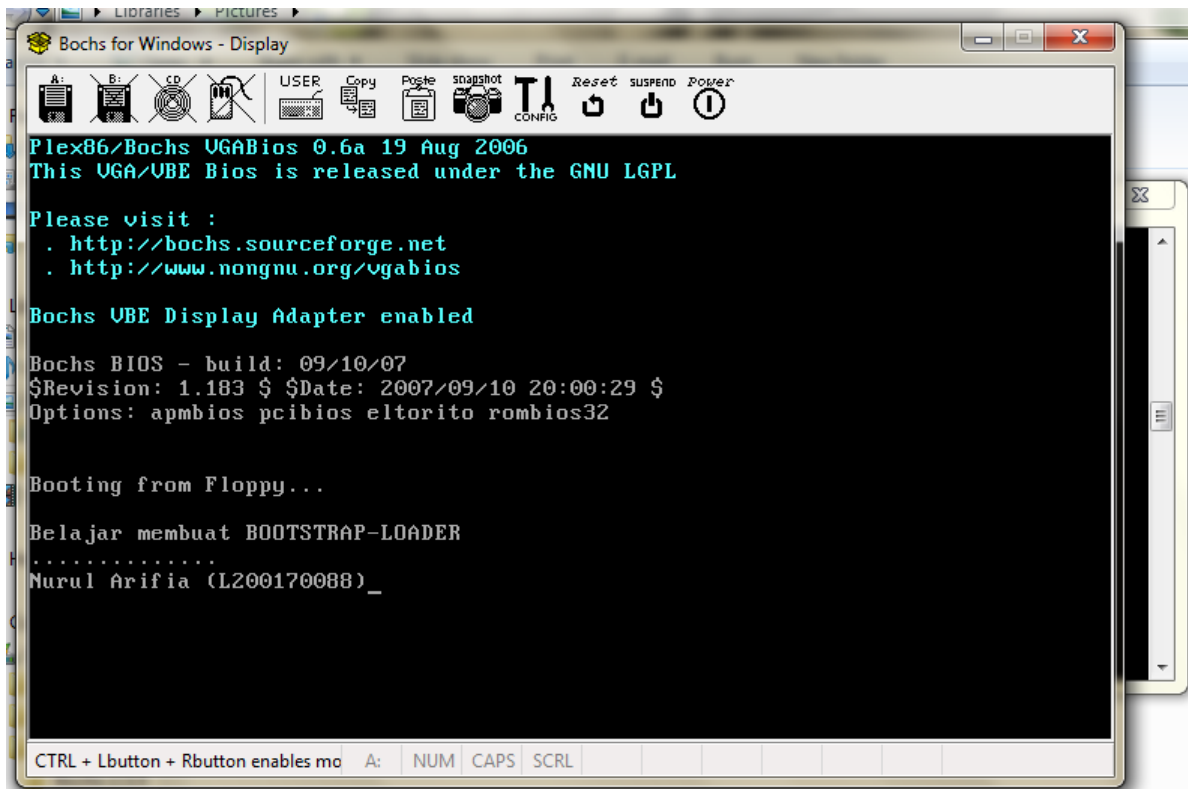

```
C:\Windows\system32\cmd.exe

===============================================================================
                    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 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\LAB2>_
```

(8)


```
Bochs for Windows - Display

Plex86/Bochs VGABios 0.6a 19 Aug 2006
This VGA/VBE Bios is released under the GNU LGPL

Please visit :
 . http://bochs.sourceforge.net
 . http://www.nongnu.org/vgabios

Bochs VBE Display Adapter enabled

Bochs BIOS - build: 09/10/07
$Revision: 1.183 $ $Date: 2007/09/10 20:00:29 $
Options: apmbios pcibios eltorito rombios32


Booting from Floppy...

Belajar membuat BOOTSTRAP-LOADER
.............
Nurul Arifia (L200170088)_

CTRL + Lbutton + Rbutton enables mo    A:    NUM  CAPS  SCRL
```
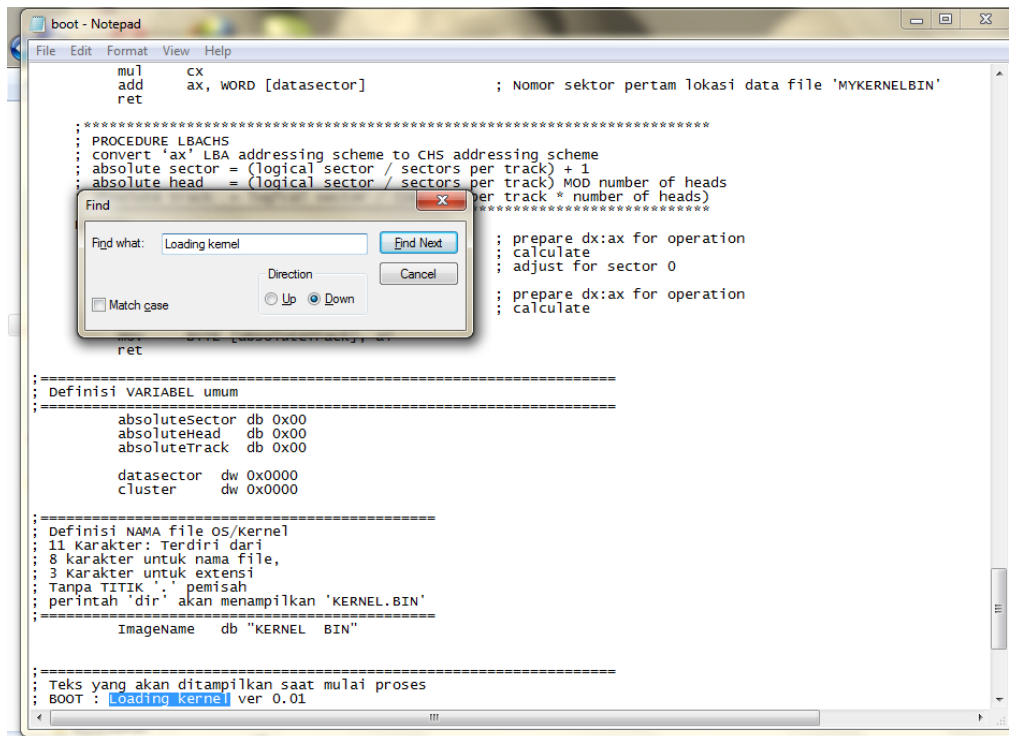
(9)

boot - Notepad

File　Edit　Format　View　Help

```
        mul    cx
        add    ax, WORD [datasector]          ; Nomor sektor pertam lokasi data file 'MYKERNELBIN'
        ret

        ;****************************************************************
        ; PROCEDURE LBACHS
        ; convert 'ax' LBA addressing scheme to CHS addressing scheme
        ; absolute sector = (logical sector / sectors per track) + 1
        ; absolute head   = (logical sector / sectors per track) MOD number of heads
                                              er track * number of heads)
                                              ****************************
                                                ; prepare dx:ax for operation
                                                ; calculate
                                                ; adjust for sector 0

                                                ; prepare dx:ax for operation
                                                ; calculate
        ret

;================================================================
; Definisi VARIABEL umum
;================================================================
        absoluteSector  db 0x00
        absoluteHead    db 0x00
        absoluteTrack   db 0x00

        datasector  dw 0x0000
        cluster     dw 0x0000

;================================================================
; Definisi NAMA file OS/Kernel
; 11 Karakter: Terdiri dari
; 8 karakter untuk nama file,
; 3 Karakter untuk extensi
; Tanpa TITIK '.' pemisah
; perintah 'dir' akan menampilkan 'KERNEL.BIN'
;================================================================
        ImageName   db "KERNEL  BIN"

;================================================================
; Teks yang akan ditampilkan saat mulai proses
; BOOT : Loading kernel ver 0.01
```
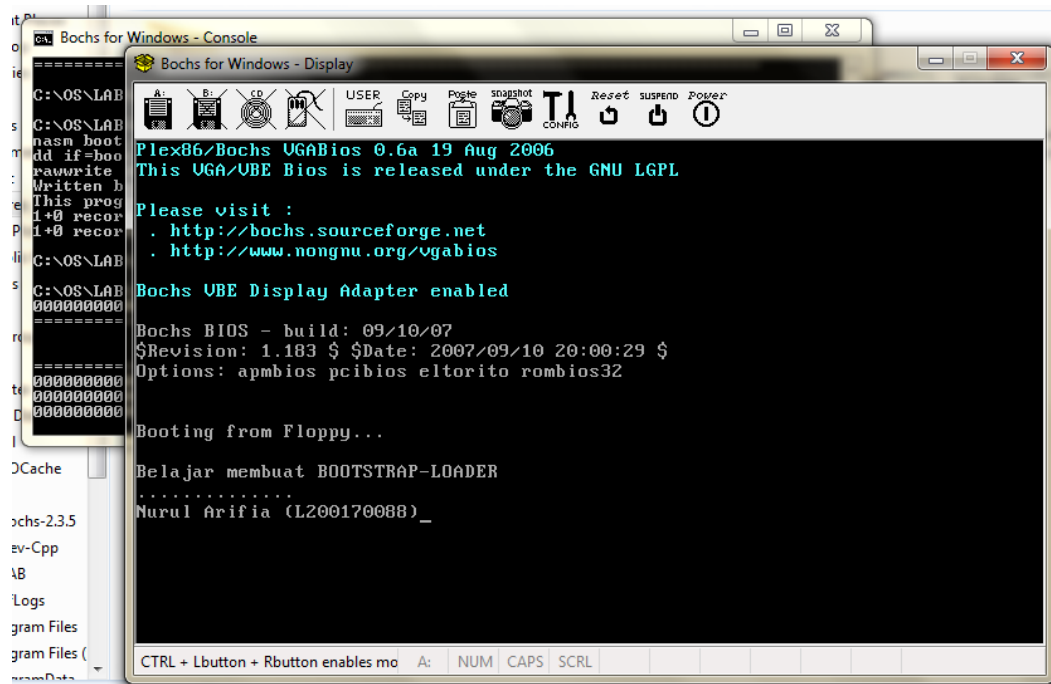
Find

Find what: `Loading kernel`   [Find Next]

Direction ○ Up ● Down   [Cancel]

☐ Match case

Bochs for Windows - Console

Bochs for Windows - Display

```
Plex86/Bochs VGABios 0.6a 19 Aug 2006
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Booting from Floppy...

Belajar membuat BOOTSTRAP-LOADER
.............
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```
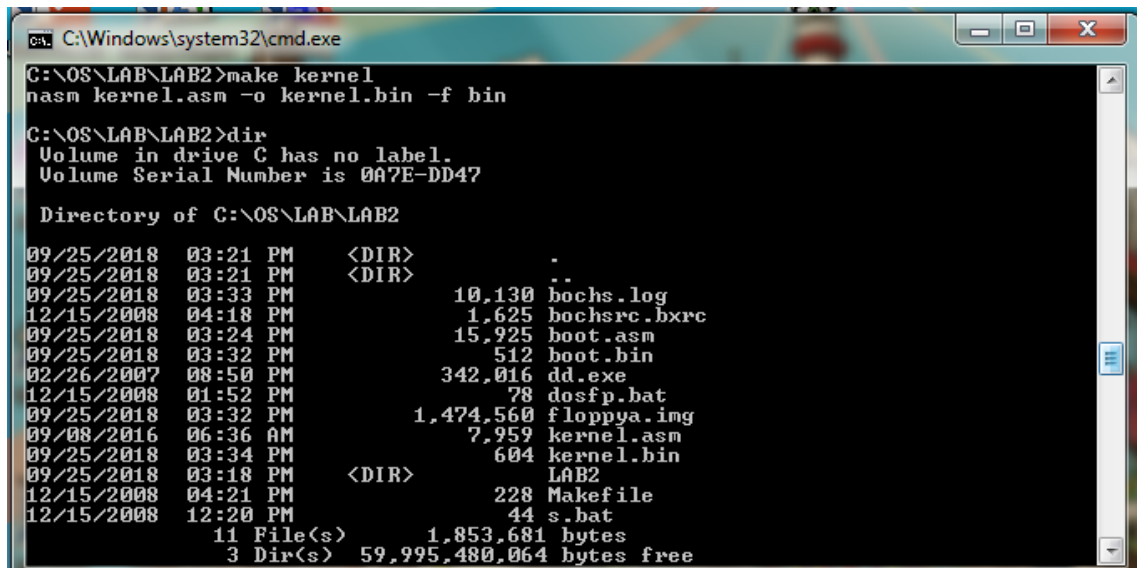
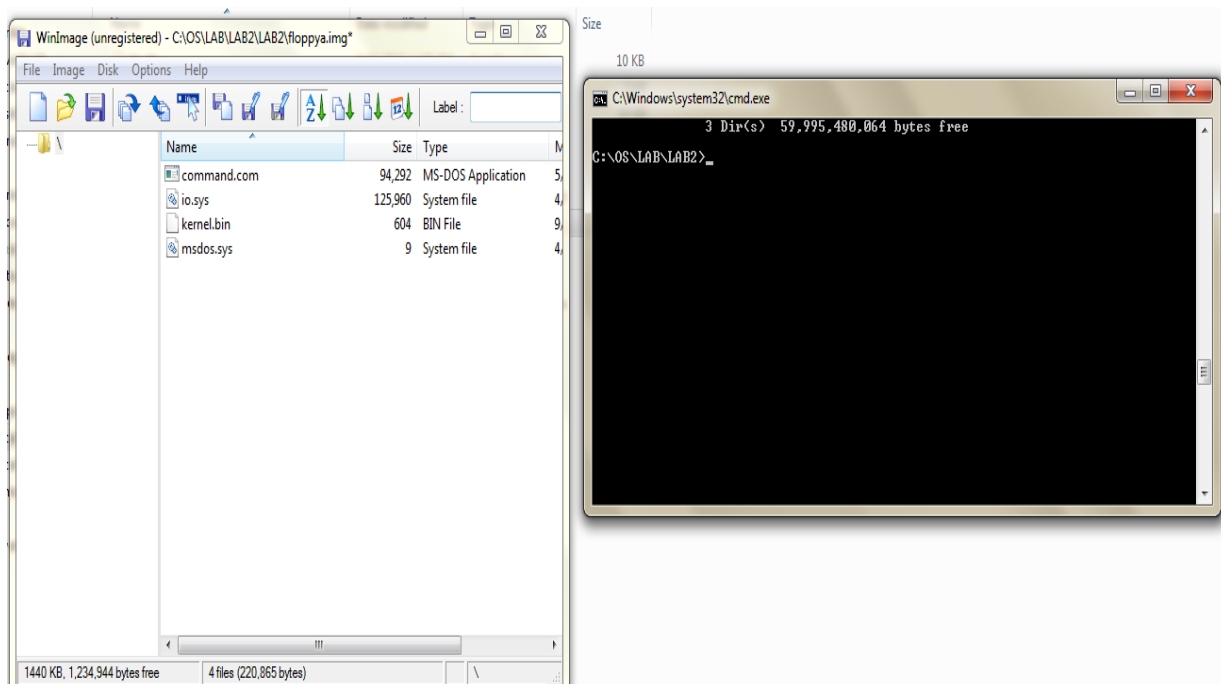CTRL + Lbutton + Rbutton enables mo   A: NUM CAPS SCRL

(10)

(11)

(12)

(13)