

**LAPORAN PRAKTIKUM MODUL 1**  
**PRAKTIKUM SISTEM OPERASI**



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```
Command Prompt
Microsoft Windows [Version 10.0.18362.1082]
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C:\Users\HP>cd os

C:\Users\HP\OS>dir
Volume in drive C is Windows
Volume Serial Number is 7A64-D55A

Directory of C:\Users\HP\OS

28/09/2020 13:37 <DIR>      .
28/09/2020 13:37 <DIR>      ..
12/09/2019 16:11 <DIR>      Bochs-2.3.5
28/09/2020 13:31          0 boot.asm
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
28/09/2020 13:37          4 M.txt
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
                6 File(s)      2,659,813 bytes
                5 Dir(s)      4,221,435,904 bytes free

C:\Users\HP\OS>setpath

C:\Users\HP\OS>Path=C:\OS\Dev-Cpp\bin;C:\OS\Bochs-2.3.5;c:\OS\Perl;C:\Windows;C:\Windows\System32
C:\Users\HP\OS>type setpath.bat
Path=C:\OS\Dev-Cpp\bin;C:\OS\Bochs-2.3.5;c:\OS\Perl;C:\Windows;C:\Windows\System32

C:\Users\HP\OS>cd LAB

C:\Users\HP\OS\LAB>cd LAB1

C:\Users\HP\OS\LAB\LAB1>Notepad boot.asm

C:\Users\HP\OS\LAB\LAB1>Notepad Makefile

C:\Users\HP\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.

C:\Users\HP\OS\LAB\LAB1>dir
Volume in drive C is Windows
Volume Serial Number is 7A64-D55A

Directory of C:\Users\HP\OS\LAB\LAB1

28/09/2020 21:09 <DIR>      .
28/09/2020 21:09 <DIR>      ..
10/09/2019 16:19      10,235 bochsrc.bxrc
15/12/2008 16:17      1,628 bochsrc.bxrc
14/12/2008 12:02      14,365 boot.asm
28/09/2020 21:09          512 boot.bin
15/12/2008 00:47          78 dosfp.bat
28/09/2020 21:09      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
                9 File(s)      1,509,615 bytes
                2 Dir(s)      4,220,309,504 bytes free

C:\Users\HP\OS\LAB\LAB1>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:\Users\HP\OS\LAB\LAB1>make clean
rm -f *.bin boot kernel

C:\Users\HP\OS\LAB\LAB1>del floppya.img /P
C:\Users\HP\OS\LAB\LAB1>floppya.img, Delete (Y/N)? Y

C:\Users\HP\OS\LAB\LAB1>dir
Volume in drive C is Windows
Volume Serial Number is 7A64-D55A

Directory of C:\Users\HP\OS\LAB\LAB1
```

```
Command Prompt

Directory of C:\Users\HP\OS\LAB\LAB1
28/09/2020 21:11 <DIR> .
28/09/2020 21:11 <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
15/12/2008 00:47 78 dosfp.bat
14/12/2008 11:45 7.966 kernel.asm
15/12/2008 16:21 227 Makefile
15/12/2008 12:20 44 s.bat
7 File(s) 34.543 bytes
2 Dir(s) 4.220.821.504 bytes free

C:\Users\HP\OS\LAB\LAB1>bximage
=====
bximage
Disk Image Creation Tool for Bochs
$Id: bximage.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
```

```
Command Prompt

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:\Users\HP\OS\LAB\LAB1>dir
Volume in drive C is Windows
Volume Serial Number is 7A64-D55A

Directory of C:\Users\HP\OS\LAB\LAB1
28/09/2020 21:11 <DIR> .
28/09/2020 21:11 <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
15/12/2008 00:47 78 dosfp.bat
28/09/2020 21:11 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
8 File(s) 1.509.103 bytes
2 Dir(s) 4.218.159.104 bytes free

C:\Users\HP\OS\LAB\LAB1>dosfp
C:\Users\HP\OS\LAB\LAB1>cd "..\..\Bochs-2.3.5\dos"
C:\Users\HP\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:
[MGUI ] POWER button turned off.
=====
```

```
Command Prompt - bimage
Volume in drive C is Windows
Volume Serial Number is 7A64-D55A

Directory of C:\Users\HP\OS\LAB\LAB1

28/09/2020 16:06 <DIR> .
28/09/2020 16:06 <DIR> ..
10/09/2019 16:19 10.235 bochsout.txt
15/12/2008 16:17
14/12/2008 12:02 C:\Users\HP\OS\Bochs-2.3.5\bimage.exe
15/12/2008 00:47
14/12/2008 11:45 Do you want to create a floppy disk image or a hard disk image?
15/12/2008 16:21 Please type hd or fd. [hd] fd
15/12/2008 12:20
    7 File(s) Choose the size of floppy disk image to create, in megabytes.
    2 Dir(s) 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]
C:\Users\HP\OS\LAB\LAB1>I will create a floppy image with
Volume in drive C is Windows
Volume Serial Number is 7A64-D55A
    cyl=80
    heads=2
    sectors per track=18
    total sectors=2880
    total bytes=1474560
Directory of C:\Users\HP\OS\LAB\LAB1

28/09/2020 16:06 <DIR> .
28/09/2020 16:06 <DIR> ..
10/09/2019 16:19 10.235 bochsout.txt
15/12/2008 16:17
14/12/2008 12:02 What should I name the image?
15/12/2008 00:47 [a.img] floppy.a.img
14/12/2008 11:45 The disk image 'floppya.img' already exists. Are you sure you want to replace it?
15/12/2008 16:21 Please type yes or no. [no] yes
15/12/2008 12:20 Writing: [] Done.
    7 File(s) I wrote 1474560 bytes to floppya.img.
    2 Dir(s)
    The following line should appear in your bochsrc:
C:\Users\HP\OS\LAB\LAB1>floppya: image="floppya.img", status=inserted
=====
(The line is stored in your windows clipboard, use CTRL-V to paste)
Press any key to continue
$Id: bimage_

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

```
Command Prompt
(The line is stored in your windows clipboard, use CTRL-V to paste)
Press any key to continue

C:\Users\HP\OS\LAB\LAB1>dir
Volume in drive C is Windows
Volume Serial Number is 7A64-D55A

Directory of C:\Users\HP\OS\LAB\LAB1

28/09/2020 21:11 <DIR> .
28/09/2020 21:11 <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
15/12/2008 00:47 78 dosfp.bat
28/09/2020 21:11 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
    8 File(s) 1,509,103 bytes
    2 Dir(s) 4,218,159,104 bytes free

C:\Users\HP\OS\LAB\LAB1>dosfp
C:\Users\HP\OS\LAB\LAB1>cd "..\..\Bochs-2.3.5\dos"
C:\Users\HP\OS\Bochs-2.3.5\dos>..\bochs -q -f bochsrc2.txt
000000000000[APIC?] local apic in initializing
=====
Bochs x86 Emulator 2.3.5
Build from CVS snapshot, on September 16, 2007
000000000000[ ] reading configuration from bochsrc2.txt
000000000000[ ] installing win32 module as the Bochs GUI
000000000000[ ] using log file bochsout.txt
# In bx_win32_gui_c::exit(void)!
=====
Bochs is exiting with the following message:
[MGUI ] POWER button turned off.
=====
C:\Users\HP\OS\Bochs-2.3.5\dos>cd "C:\os\lab\lab1"
```

Writing: [] Done.

I wrote 1474560 bytes to floppy.aimg.

The following line should appear in your bochsrc:

floppya: image="floppya.aimg", status=inserted

(The line is stored in your windows clipboard, use CTRL-V to paste)

Press any key to continue

C:\Users\HP\OS\LAB\LAB1>dir

Volume in drive C is Windows  
Volume Serial Number is 7A64-D55A

Directory of C:\Users\HP\OS\LAB\LAB1

```
28/09/2020 21:11 <DIR> .
28/09/2020 21:11 <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
15/12/2008 00:47          78 dosfp.bat
28/09/2020 21:11    1.474.560 floppya.aimg
14/12/2008 11:45      7.966 kernel.asm
15/12/2008 16:21       227 Makefile
15/12/2008 12:20         44 s.bat
            8 File(s)      1.509.103 bytes
            2 Dir(s)      4.218.159.104 bytes free
```

C:\Users\HP\OS\LAB\LAB1>dosfp

C:\Users\HP\OS\LAB\LAB1>cd "..\..\Bochs-2.3.5\dos"

C:\Users\HP\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

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