

LAPORAN PRAKTIKUM SISTEM OPERASI

MODUL 1

**PENGENALAN SISTEM PENGEMBANGAN OS DENGAN PC
SIMULATOR 'BOSCH'**



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HASIL KEGIATAN MODUL 1 :

```
Bochs for Windows - Console
Microsoft Windows [Version 10.0.18363.1082]
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C:\Users\acer>cd..
C:\Users>cd..
C:\>cd OS
C:\OS>dir
Volume in drive C has no label.
Volume Serial Number is 0828-3388

Directory of C:\OS

26/09/2020  20:35    <DIR>      .
26/09/2020  20:35    <DIR>      ..
26/09/2020  20:34    <DIR>      Bochs-2.3.5
26/09/2020  20:35    <DIR>      Dev-Cpp
17/12/2008  00:08             1.096.291  i386.pdf
26/09/2020  20:35    <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)    159.271.129.088 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 lab1
The system cannot find the path specified.

C:\OS>cd LAB
C:\OS\LAB>LAB1
'LAB1' is not recognized as an internal or external command,
operable program or batch file.

C:\OS\LAB>dir
Volume in drive C has no label.
```

```
Bochs for Windows - Console
C:\OS\LAB>dir
Volume in drive C has no label.
Volume Serial Number is 0828-3388

Directory of C:\OS\LAB

26/09/2020  20:35    <DIR>      .
26/09/2020  20:35    <DIR>      ..
26/09/2020  21:02    <DIR>      LAB1
26/09/2020  20:35    <DIR>      lab1_O
26/09/2020  20:35    <DIR>      LAB2
26/09/2020  20:35    <DIR>      lab2_org
26/09/2020  20:35    <DIR>      LAB3
26/09/2020  20:35    <DIR>      lab3_ORG
26/09/2020  20:35    <DIR>      lab4
26/09/2020  20:35    <DIR>      lab5
26/09/2020  20:35    <DIR>      lab6
26/09/2020  20:35    <DIR>      lab6b
               0 File(s)           0 bytes
               12 Dir(s)    159.273.066.496 bytes free

C:\OS\LAB>cd LAB1
C:\OS\LAB\LAB1>dir
Volume in drive C has no label.
Volume Serial Number is 0828-3388

Directory of C:\OS\LAB\LAB1

26/09/2020  21:02    <DIR>      .
26/09/2020  21:02    <DIR>      ..
26/09/2020  21:01             10.153  bochsout.txt
15/12/2008  15:17             1.628  bochsnc.bxrc
14/12/2008  12:02             14.365  boot.asm
26/09/2020  20:45             512  boot.bin
16/09/2015  07:51             512  boots.bin
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
               9 File(s)      35.485 bytes
```

```
Bochs for Windows - Console
15/12/2008 12:20 44 s.bat
9 File(s) 35,485 bytes
2 Dir(s) 159,272,767,488 bytes free

C:\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] 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] floppy.img

Writing: [] Done.

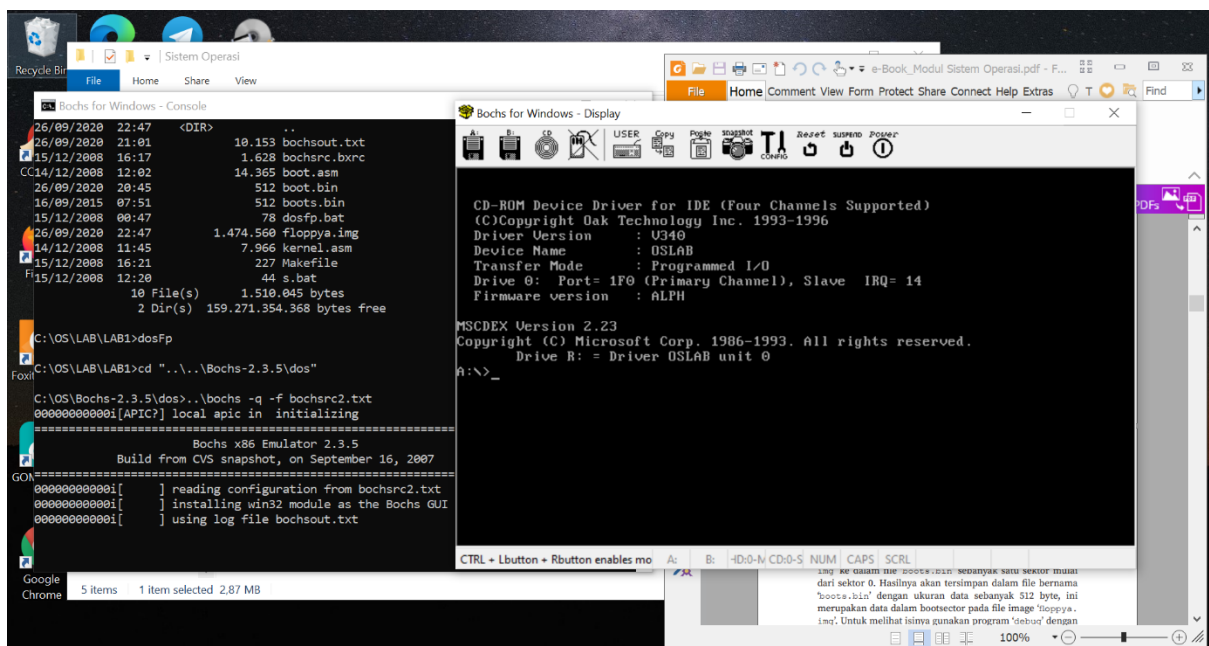
I wrote 1474560 bytes to floppy.img.

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

Press any key to continue

C:\OS\LAB\LAB1>dir
Volume in drive C has no label.
Volume Serial Number is 0828-338B
```

Membuka Bochs



```
Bochs for Windows - Console

Directory of C:\OS\LAB\LAB1

26/09/2020 22:47 <DIR>      .
26/09/2020 22:47 <DIR>      ..
26/09/2020 21:01          10.153 bochsout.txt
15/12/2008 16:17          1.628 bochsrc.bxrc
14/12/2008 12:02          14.365 boot.asm
26/09/2020 20:45          512 boot.bin
16/09/2015 07:51          512 boots.bin
15/12/2008 00:47          78 dosfp.bat
26/09/2020 22:47          1.474 floppy.img
14/12/2008 11:45          7.965 kernel.asm
15/12/2008 16:21          227 Makefile
15/12/2008 12:20          44 s.bat
                10 File(s)      1.510.045 bytes
                2 Dir(s)      159.271.354.368 bytes free

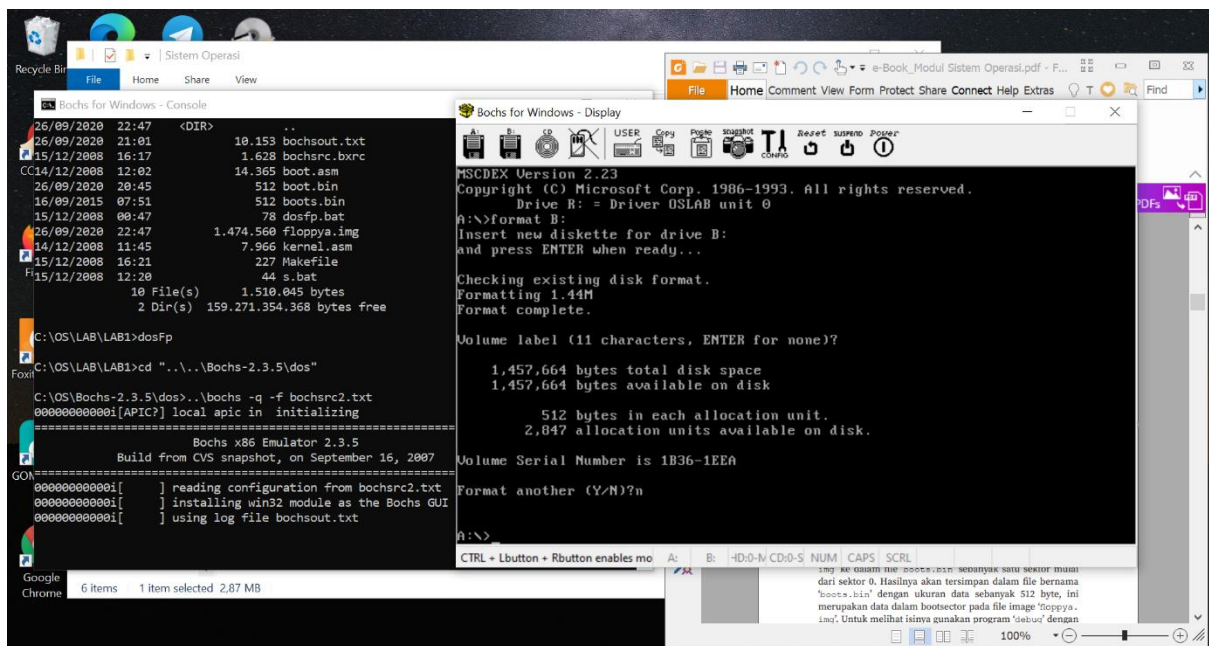
C:\OS\LAB\LAB1>dosfp

C:\OS\LAB\LAB1>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\lab1"

C:\OS\LAB\LAB1>dd if=floppy.img of=boots.bin count=1
rawwrite dd for windows version 0.5.
```

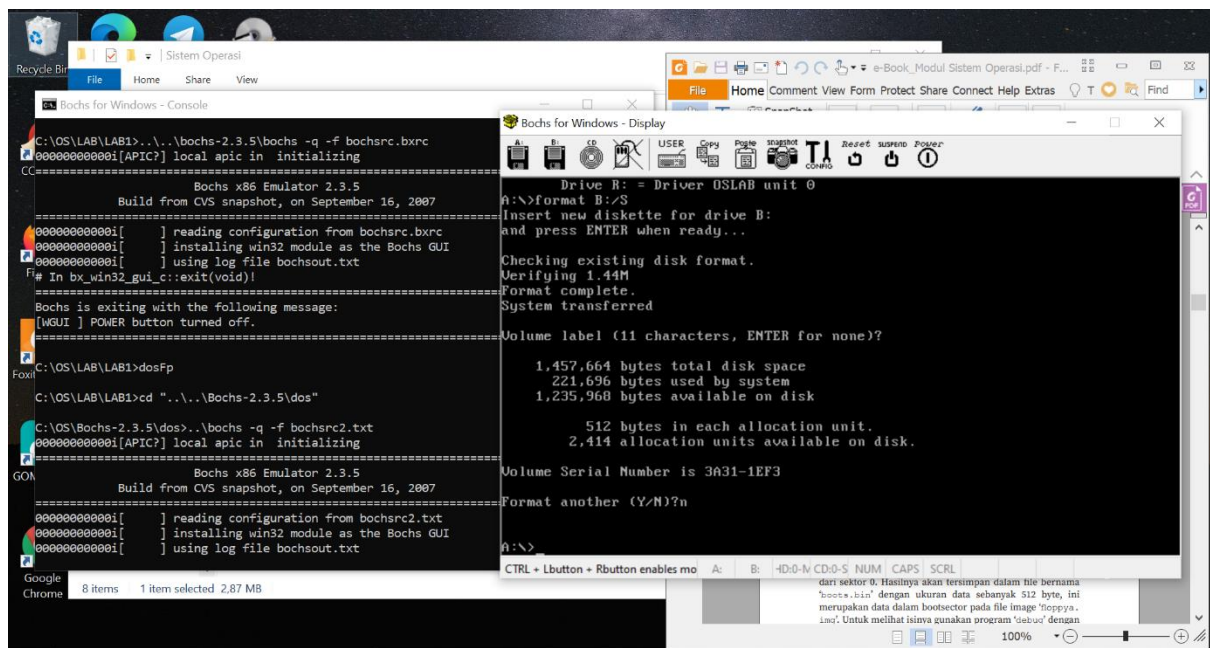


```
Bochs for Windows - Console
C:\OS\LAB\LAB1>dd if=floppya.img of=boots.bin count=1
rawwrite dd for windows version 0.5.
Written by John Newbigin <jn@it.swin.edu.au>
This program is covered by the GPL. See copying.txt for details
1+0 records in
1+0 records out

C:\OS\LAB\LAB1>debug boots.bin
'debug' is not recognized as an internal or external command,
operable program or batch file.

C:\OS\LAB\LAB1>tddump boots.bin
Turbo Dump Version 5.0.16.12 Copyright (c) 1988, 2000 Inprise Corporation
Display of File 800TS.BIN

000000: EB 3C 90 4D 53 57 49 4E 34 2E 31 00 02 01 01 00 .<.MSWIN4.1....
000010: 02 E0 00 40 08 F0 09 00 12 00 02 00 00 00 00 00 ...@.....
000020: 00 00 00 00 00 00 29 EA 1E 36 1B 4E 4F 20 4E 41 .....).6.NO NA
000030: 4D 45 20 20 20 20 46 41 54 31 32 20 20 20 20 33 C9 ME FAT12 3.
000040: 8E D1 BC FC 7B 16 07 BD 78 00 C5 76 00 1E 56 16 ....{...X..V..V.
000050: 55 BF 22 05 89 7E 00 89 4E 02 B1 0B FC F3 A4 06 U."..^..N.....
000060: 1F BD 00 7C C6 45 FE 0F 38 4E 24 7D 20 8B C1 99 ...|.E..8N$) ...
000070: E8 7E 01 83 EB 3A 66 A1 1C 7C 66 3B 07 8A 57 FC ~...:f..|fj..W.
000080: 75 06 80 CA 02 88 56 02 80 C3 10 73 ED 33 C9 FE U....V....s.3..
000090: 06 D8 7D 8A 46 10 98 F7 66 16 03 46 1C 13 56 1E ..).F...f..F..V.
0000A0: 03 46 0E 13 D1 8B 76 11 60 89 46 FC 89 56 FE B8 .F...v..'.F..V..
0000B0: 20 00 F7 E6 8B 5E 08 03 C3 48 F7 F3 01 46 FC 11 ....^..H...F..
0000C0: 4E FE 61 BF 00 07 E8 28 01 72 5E 38 2D 74 17 60 N.a...(.P>8-t..
0000D0: B1 08 0E D8 7D F3 A6 61 74 3D 4E 74 00 83 C7 20 ...}.at=Ne....
0000E0: 38 F8 72 E7 E8 D0 FE 9E D8 70 7B A7 BE 7F 7D AC ;.P.....|{...}.
0000F0: 98 03 F8 AC 98 40 74 9C 48 74 13 B4 0E 88 07 00 ;.P.....|{...}.
000100: CD 10 E8 EF BE 82 7D EB E6 BE 80 7D EB E1 CD 16 .....|{...}.
000110: 5E 1F 66 8F 84 CD 19 BE 81 7D 88 7D 1A 8D 45 FE ^..f.....}.E..
000120: 8A 4E 00 F7 E1 03 46 FC 13 56 FE B1 04 E8 C2 00 .N...F..V.....
000130: 72 D7 EA 00 02 70 00 52 50 06 53 6A 01 6A 10 91 r...p.RP.Sj.j..
000140: 8B 46 18 A2 26 05 96 92 33 D2 F7 F6 91 F7 F6 42 .F..&...3.....B
000150: 87 CA F7 76 1A 8A F2 8A E8 C0 CC 02 0A CC B8 01 ...v.....
000160: 02 80 7E 02 0E 75 04 B4 42 8B F4 8A 56 24 D0 13 ...u..B..V$...
000170: 61 61 72 0A 40 75 01 42 03 5E 08 49 75 77 C3 03 ear.@U.B.^Iuw...
000180: 18 01 27 0D 0A 49 6E 76 61 6C 69 64 20 73 79 73 ...'.Invalid sys
000190: 74 65 6D 20 64 69 73 6B FF 0D 0A 44 69 73 6B 20 tem disk...Disk
```



```
Bochs for Windows - Console
0001E0: 53 59 53 4D 53 44 4F 53 20 20 20 53 59 53 7F 01 SYSMSDOS SYS...
0001F0: 00 41 B8 00 07 60 66 6A 00 E9 3B FF 00 00 55 AA .A...fj...U.

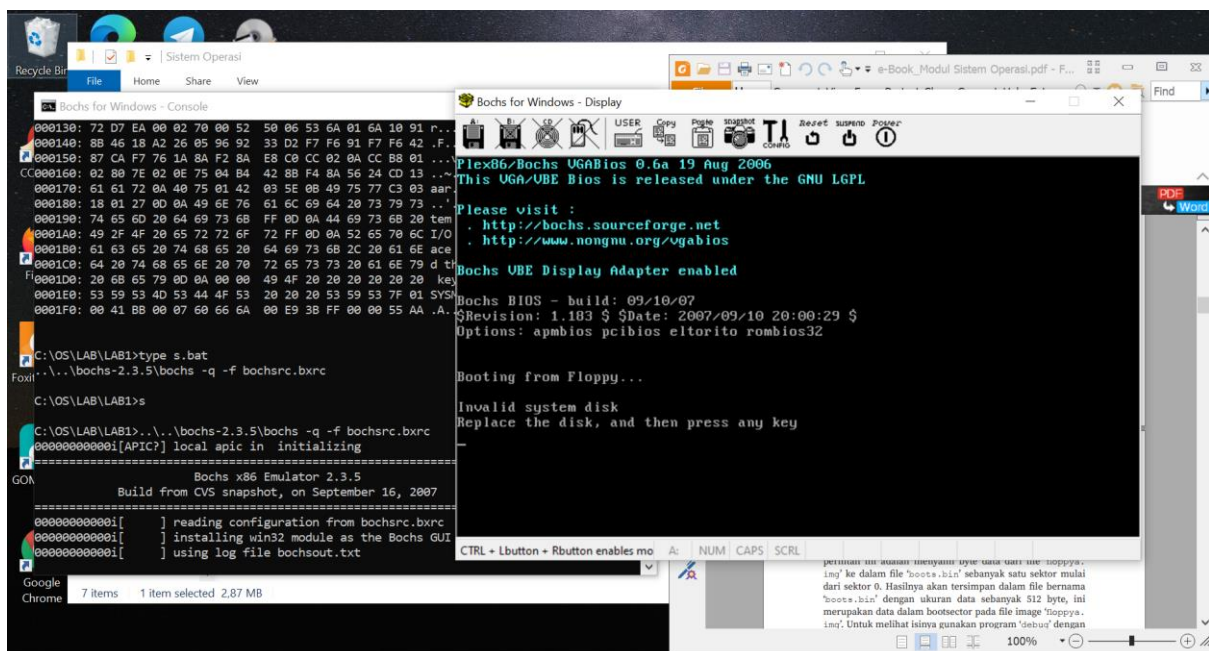
C:\OS\LAB\LAB1>type s.bat
...\.bochs-2.3.5\bochs -q -f bochsrc.bxrc

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

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

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

File Floppy yang belum bisa booting




```
Bochs for Windows - Console
# In bx_win32_gui.c::exit(void)!
=====
Bochs is exiting with the following message:
[VGUI ] POWER button turned off.
=====

C:\OS\LAB\LAB1>dosFp
C:\OS\LAB\LAB1>cd "..\..\Bochs-2.3.5\dos"
C:\OS\Bochs-2.3.5\dos>..\bochs -q -f bochs2.txt
000000000000i[APIC?] local apic in initializing
=====
Bochs x86 Emulator 2.3.5
Build from CVS snapshot, on September 16, 2007
=====
000000000000i[ ] reading configuration from bochs2.txt
000000000000i[ ] installing win32 module as the Bochs GUI
000000000000i[ ] using log file bochsout.txt
# In bx_win32_gui.c::exit(void)!
=====
Bochs is exiting with the following message:
[VGUI ] POWER button turned off.
=====

C:\OS\Bochs-2.3.5\dos>cd "C:\os\lab\lab1"
C:\OS\LAB\LAB1>S
C:\OS\LAB\LAB1>..\..\bochs-2.3.5\bochs -q -f bochs2.bxrc
000000000000i[APIC?] local apic in initializing
=====
Bochs x86 Emulator 2.3.5
Build from CVS snapshot, on September 16, 2007
=====
000000000000i[ ] reading configuration from bochs2.bxrc
000000000000i[ ] installing win32 module as the Bochs GUI
000000000000i[ ] using log file bochsout.txt
```

File Floppy sudah bisa booting

