

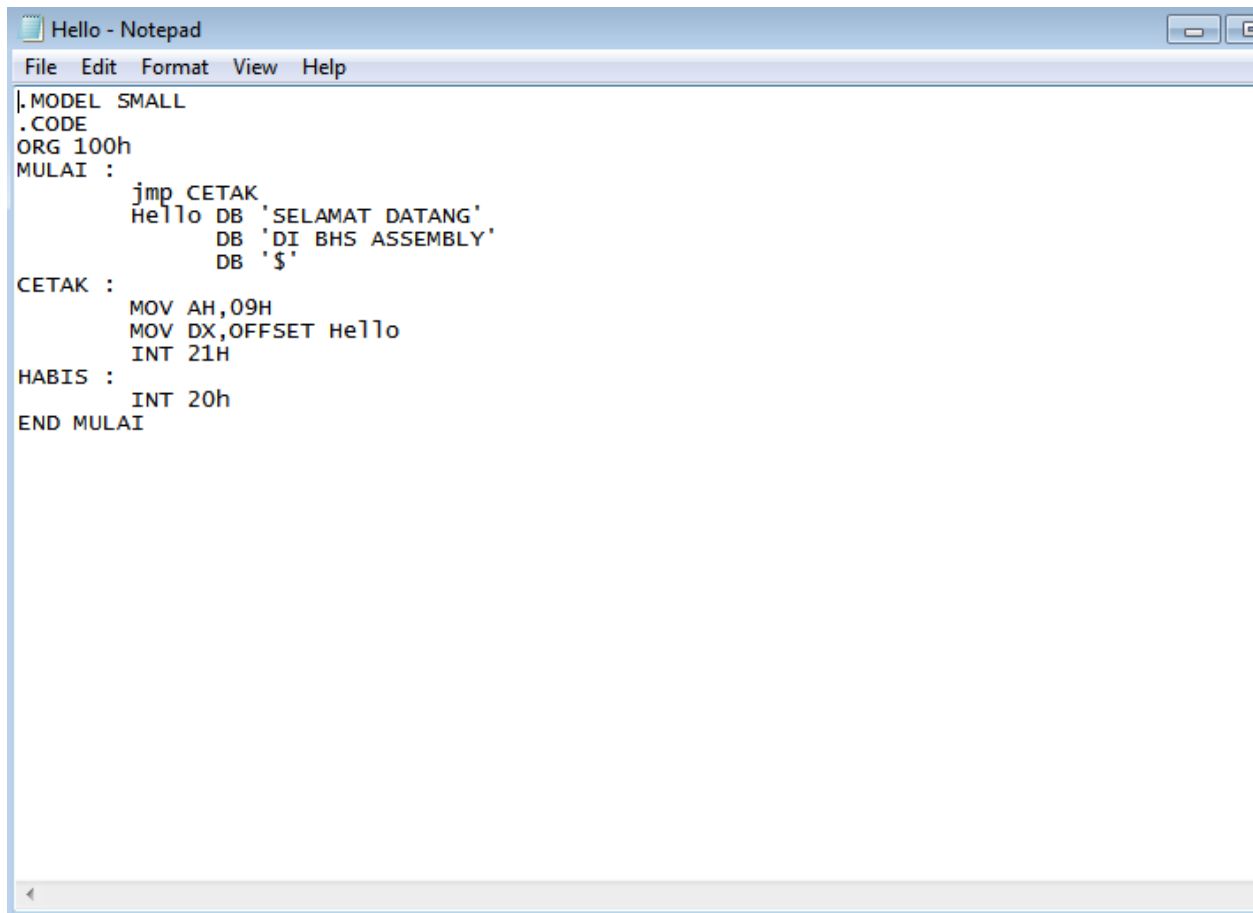
LAPORAN PRAKTIKUM
DASAR SISTEM KOMPUTER



DISUSUN OLEH:
EKO RACHMAT SATRIYO (2100018142)
JUM'AT 07.30-KELAS C

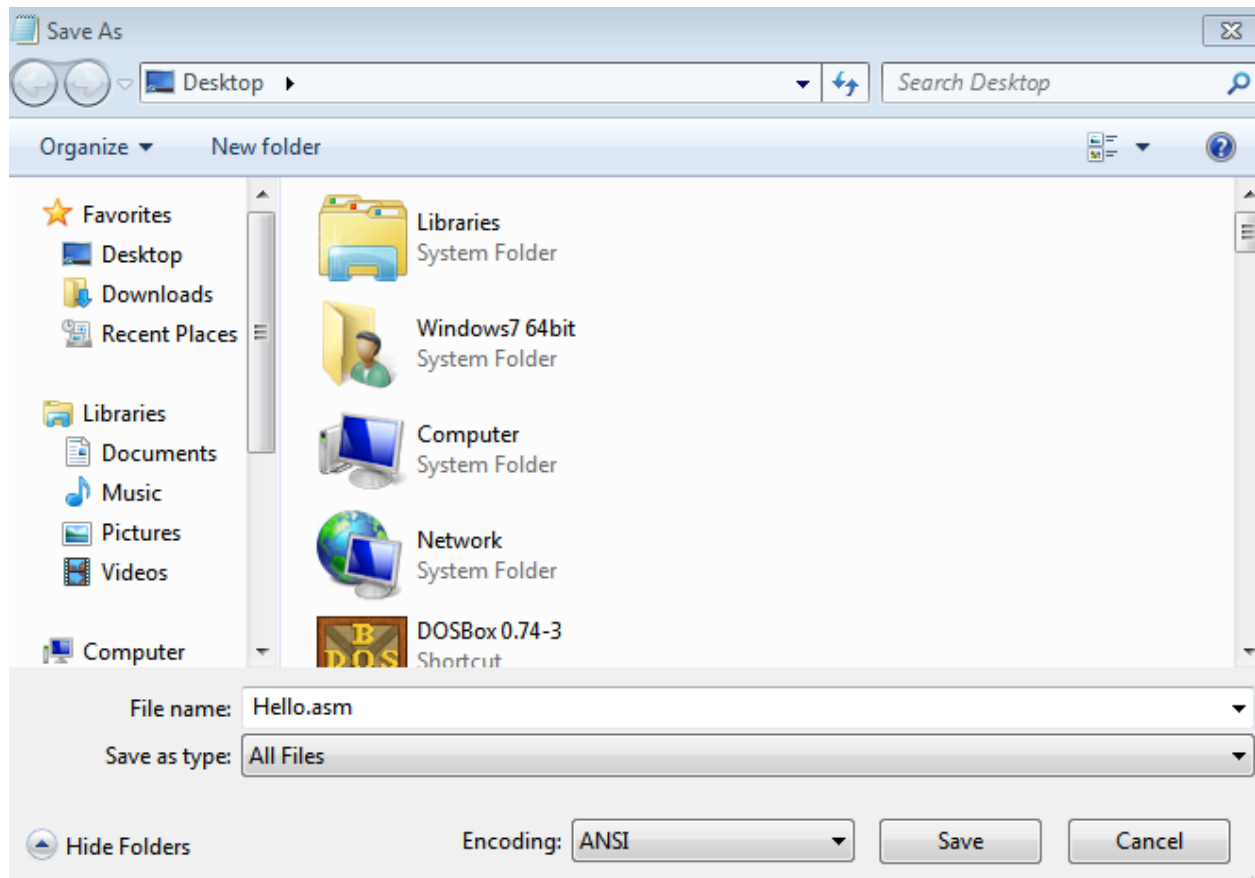
PROGRAM STUDI TEKNIK INFORMATIKA
FAKULTAS TEKNOLOGI INDUSTRI
UNIVERSITAS AHMAD DAHLAN
OKTOBER 2021

PRAKTIK I

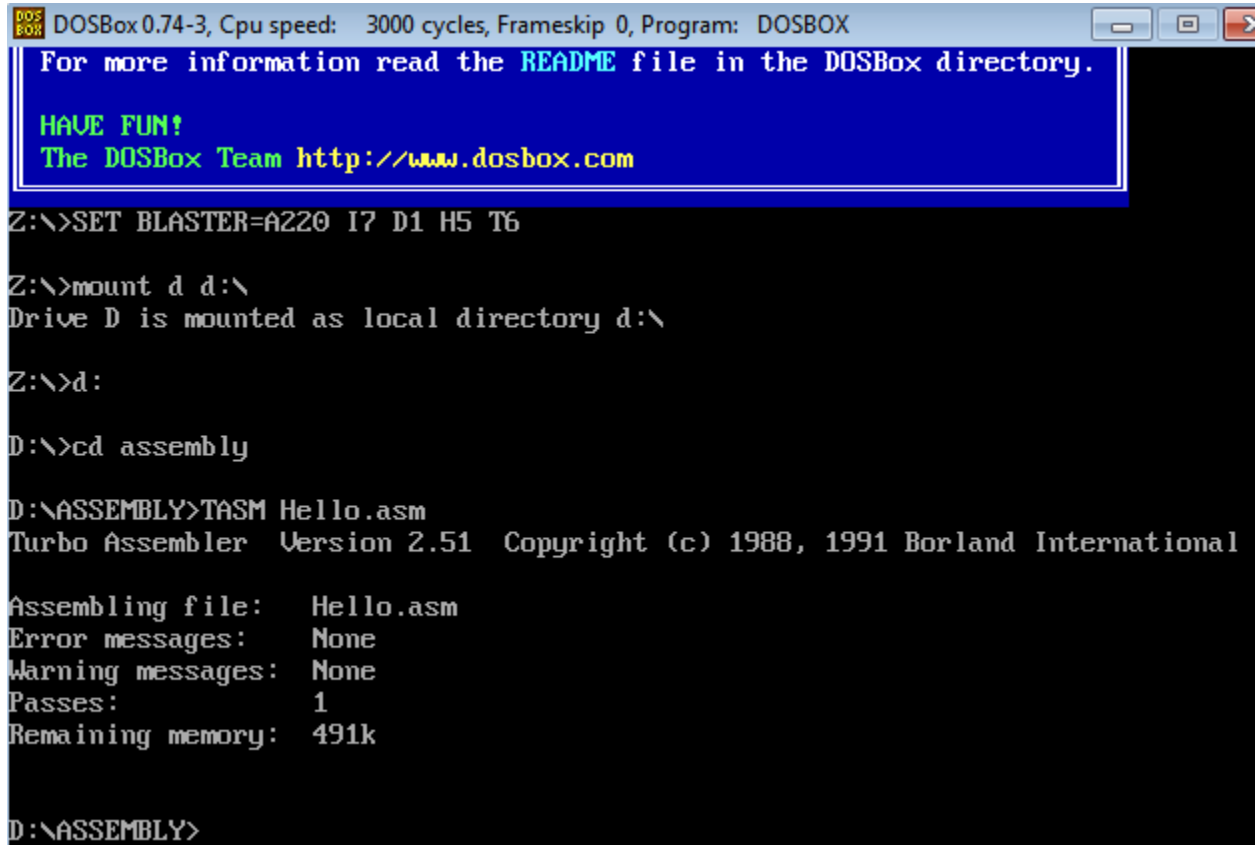


```
.MODEL SMALL
.CODE
ORG 100h
MULAI :
    jmp CETAK
    Hello DB 'SELAMAT DATANG'
          DB 'DI BHS ASSEMBLY'
          DB '$'
CETAK :
    MOV AH,09H
    MOV DX,OFFSET Hello
    INT 21H
HABIS :
    INT 20h
END MULAI
```

Membuka notepad dan menuliskan program pada modul



Menyimpan program dengan nama Hello.asm ke D



The image shows a DOSBox window with a title bar that reads "DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX". A blue message box is overlaid on the window, containing the text: "For more information read the README file in the DOSBox directory.", "HAVE FUN!", and "The DOSBox Team <http://www.dosbox.com>". Below the message box, the command prompt shows the following sequence of commands and output:

```
Z:\>SET BLASTER=A220 I7 D1 H5 T6

Z:\>mount d d:\
Drive D is mounted as local directory d:\

Z:\>d:

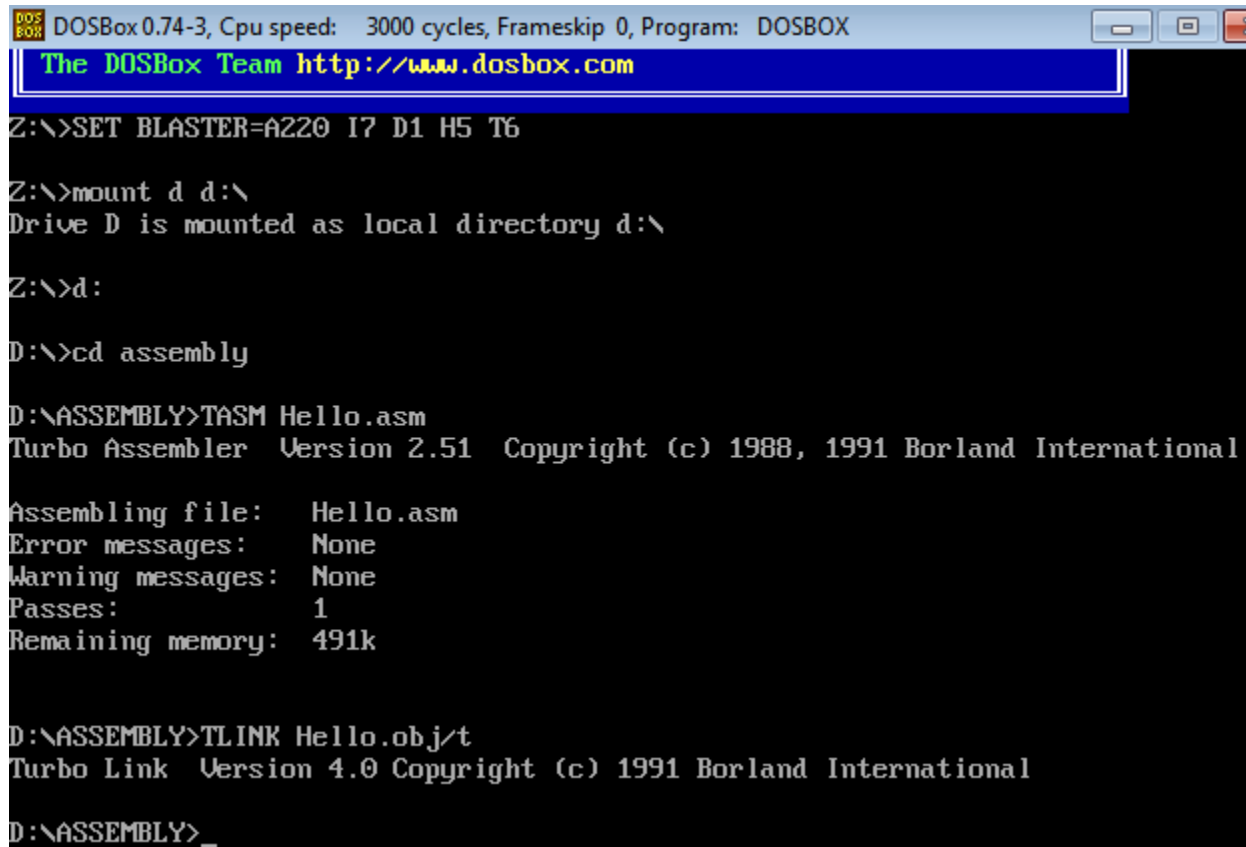
D:\>cd assembly

D:\ASSEMBLY>TASM Hello.asm
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International

Assembling file:   Hello.asm
Error messages:    None
Warning messages:  None
Passes:            1
Remaining memory:  491k

D:\ASSEMBLY>
```

Menggunakan perintah tasm untuk mengubah ke file objek.

A screenshot of a DOSBox window. The title bar reads "DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX". Below the title bar is a blue banner with the text "The DOSBox Team http://www.dosbox.com". The main window has a black background with white text. The command prompt shows the following sequence of commands and output:

```
Z:\>SET BLASTER=A220 I7 D1 H5 T6

Z:\>mount d d:\
Drive D is mounted as local directory d:\

Z:\>d:

D:\>cd assembly

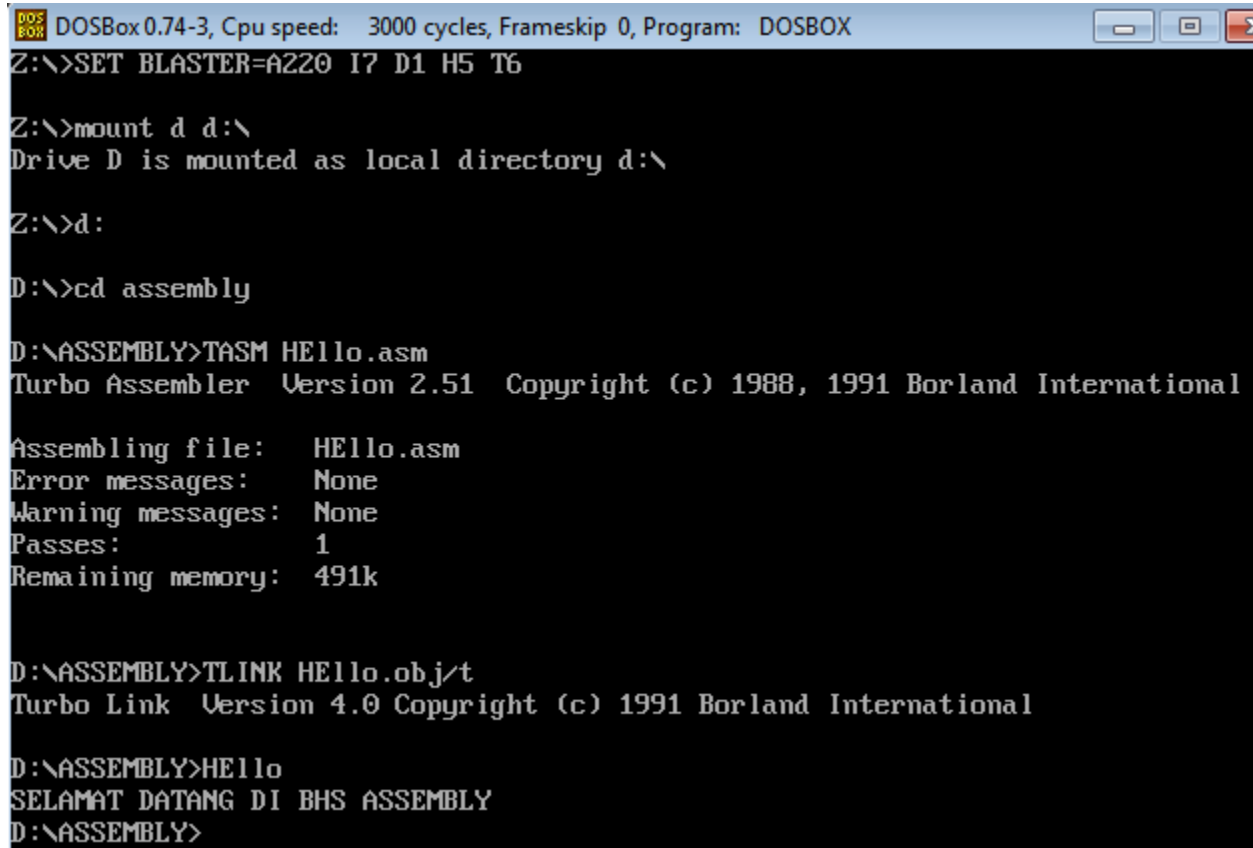
D:\ASSEMBLY>TASM Hello.asm
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International

Assembling file: Hello.asm
Error messages: None
Warning messages: None
Passes: 1
Remaining memory: 491k

D:\ASSEMBLY>TLINK Hello.obj/t
Turbo Link Version 4.0 Copyright (c) 1991 Borland International

D:\ASSEMBLY>_
```

Mengubah ke bentuk.com dengan TLINK

A screenshot of a DOSBox window. The title bar reads "DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX". The command prompt shows the following sequence of commands and output:

```
Z:\>SET BLASTER=A220 I7 D1 H5 T6

Z:\>mount d d:\
Drive D is mounted as local directory d:\

Z:\>d:

D:\>cd assembly

D:\ASSEMBLY>TASM Hello.asm
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International

Assembling file: Hello.asm
Error messages: None
Warning messages: None
Passes: 1
Remaining memory: 491k

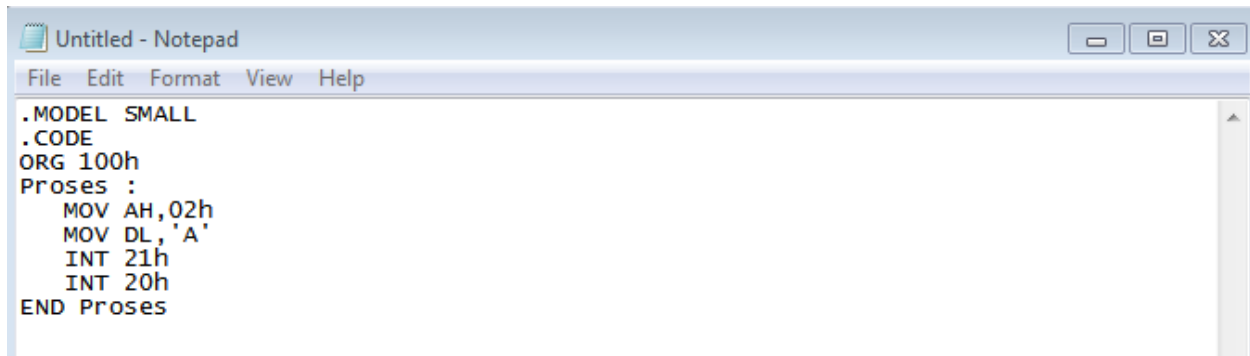
D:\ASSEMBLY>TLINK Hello.obj/t
Turbo Link Version 4.0 Copyright (c) 1991 Borland International

D:\ASSEMBLY>Hello
SELAMAT DATANG DI BHS ASSEMBLY

D:\ASSEMBLY>
```

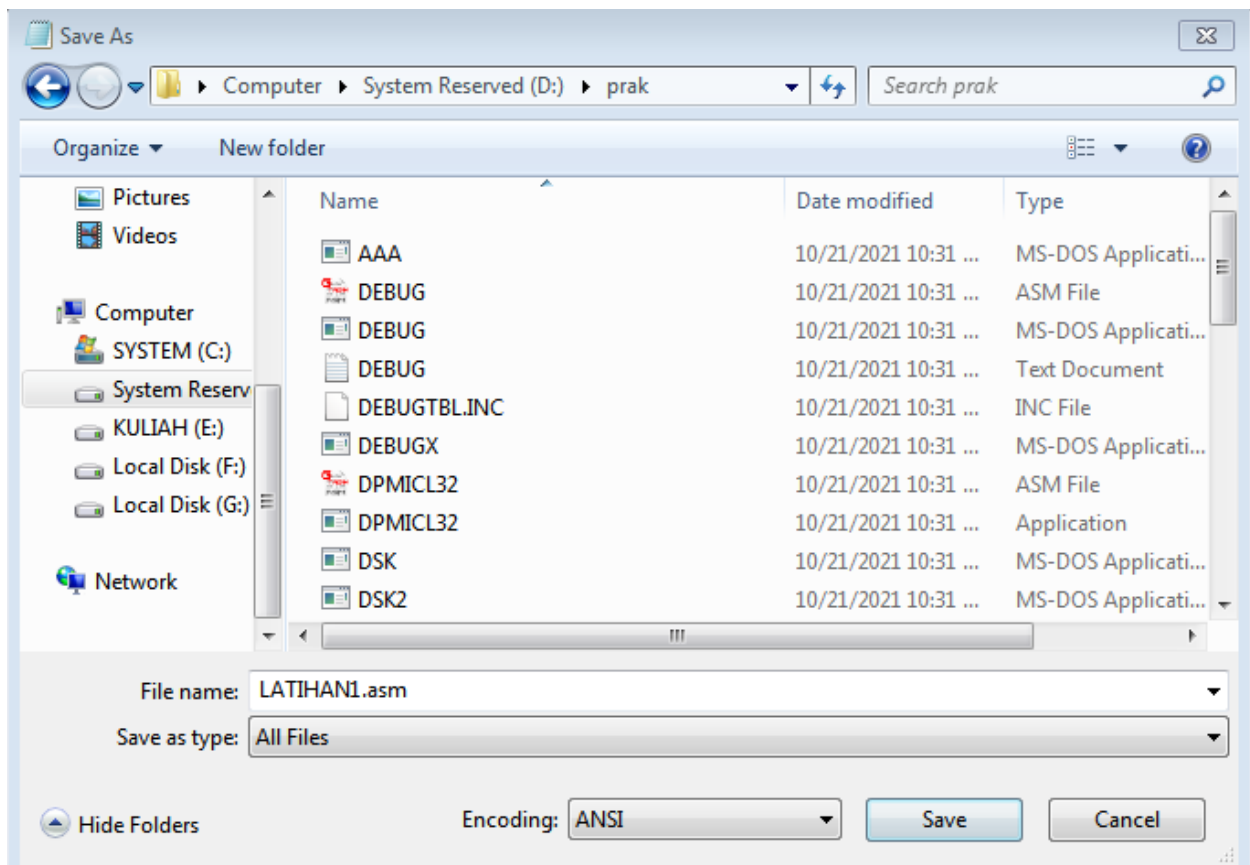
Mengetikkan "Hello" dan hasilnya "Selamat DATANGDI BHS ASSEMBLY"

PRAK II

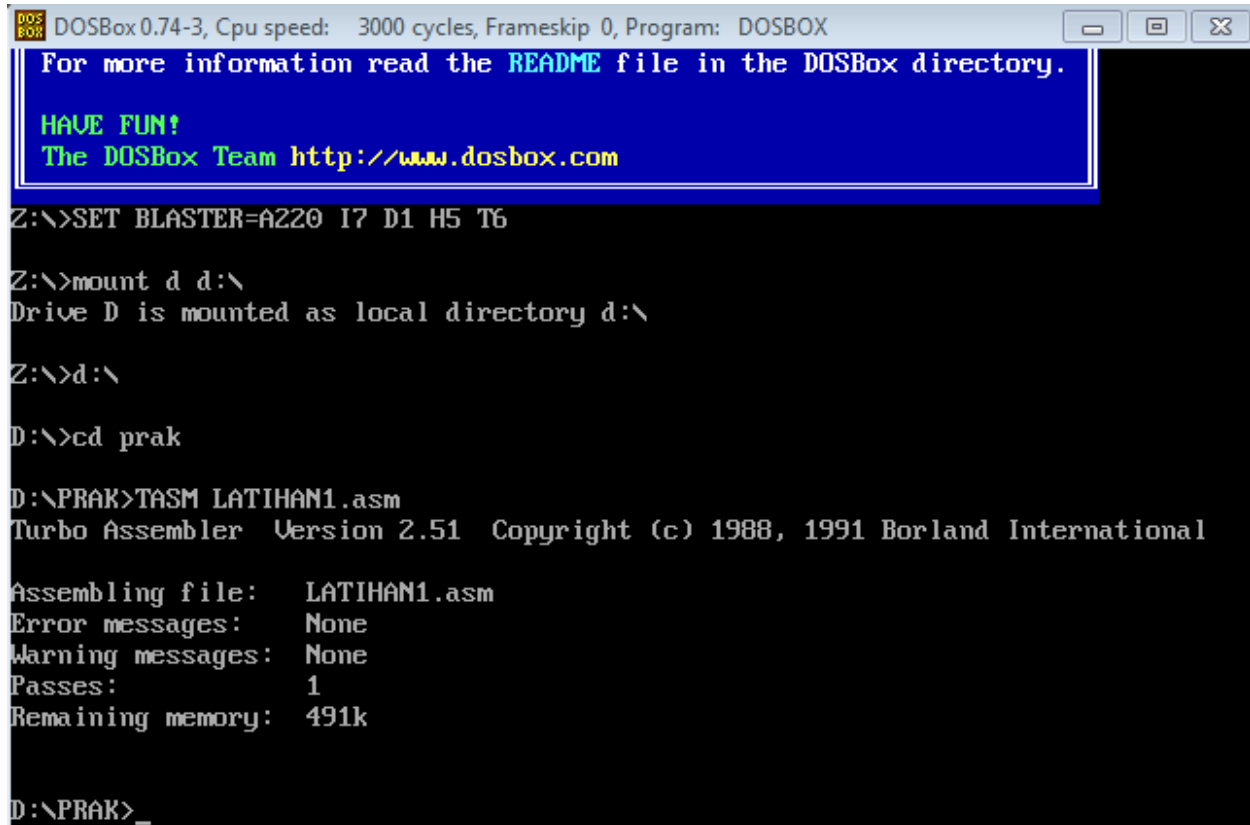


```
.MODEL SMALL
.CODE
ORG 100h
Proses :
    MOV AH,02h
    MOV DL,'A'
    INT 21h
    INT 20h
END Proses
```

Mengetikkan program



Menyimpan file ke D



DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX

For more information read the [README](#) file in the DOSBox directory.

HAVE FUN!
The DOSBox Team <http://www.dosbox.com>

```
Z:\>SET BLASTER=A220 17 D1 H5 T6

Z:\>mount d d:\
Drive D is mounted as local directory d:\

Z:\>d:\

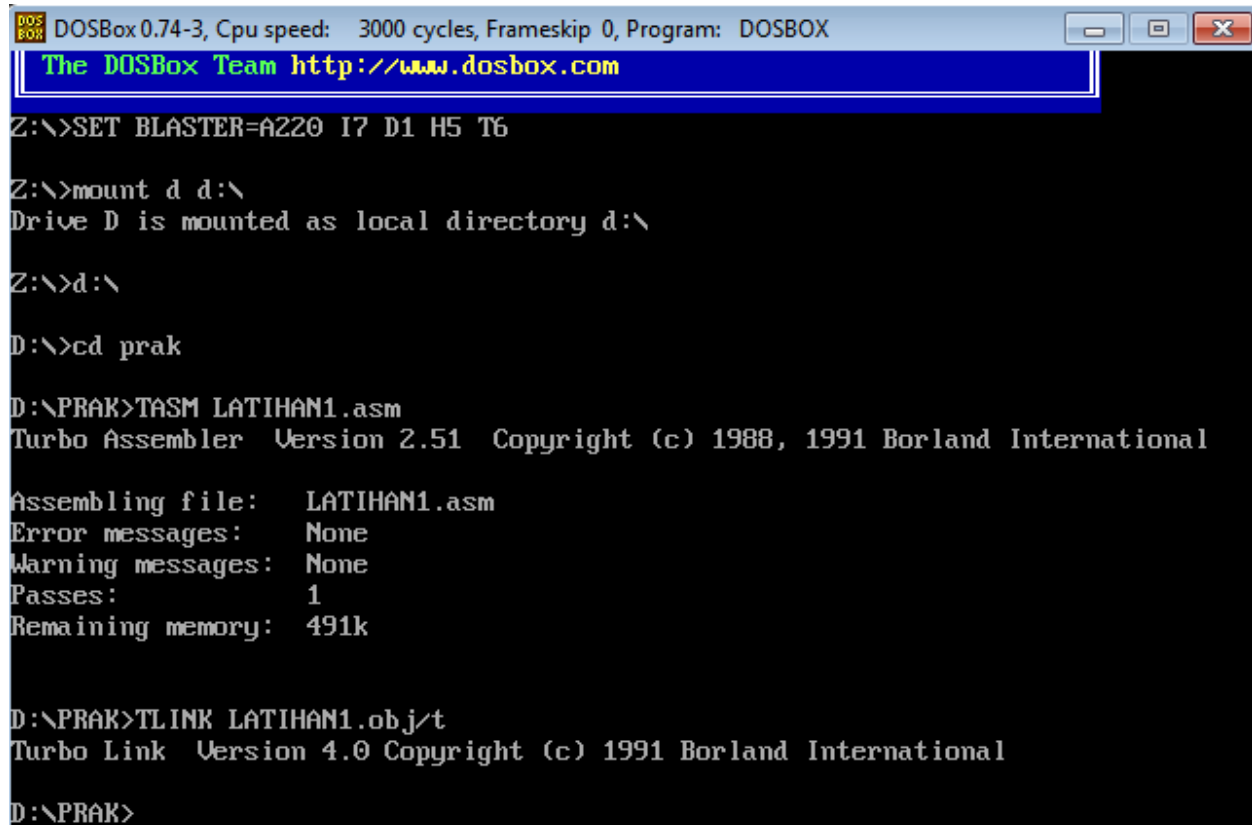
D:\>cd prak

D:\PRAK>TASM LATIHAN1.asm
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International

Assembling file: LATIHAN1.asm
Error messages: None
Warning messages: None
Passes: 1
Remaining memory: 491k

D:\PRAK>_
```

Mengubah file obj menggunakan tasm



The screenshot shows a DOSBox window with a title bar that reads "DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX". Below the title bar is a blue banner with the text "The DOSBox Team <http://www.dosbox.com>". The main window area is black with white text representing a command prompt. The commands entered are: "Z:\>SET BLASTER=A220 I7 D1 H5 T6", "Z:\>mount d d:\", "Z:\>d:\\", "D:\>cd prak", "D:\PRAK>TASM LATIHAN1.asm", and "D:\PRAK>TLINK LATIHAN1.obj/t". The output of the TASM command shows "Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International" and assembly statistics: "Assembling file: LATIHAN1.asm", "Error messages: None", "Warning messages: None", "Passes: 1", and "Remaining memory: 491k". The output of the TLINK command shows "Turbo Link Version 4.0 Copyright (c) 1991 Borland International". The prompt "D:\PRAK>" is visible at the bottom.

```
DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX
The DOSBox Team http://www.dosbox.com
Z:\>SET BLASTER=A220 I7 D1 H5 T6

Z:\>mount d d:\
Drive D is mounted as local directory d:\

Z:\>d:\

D:\>cd prak

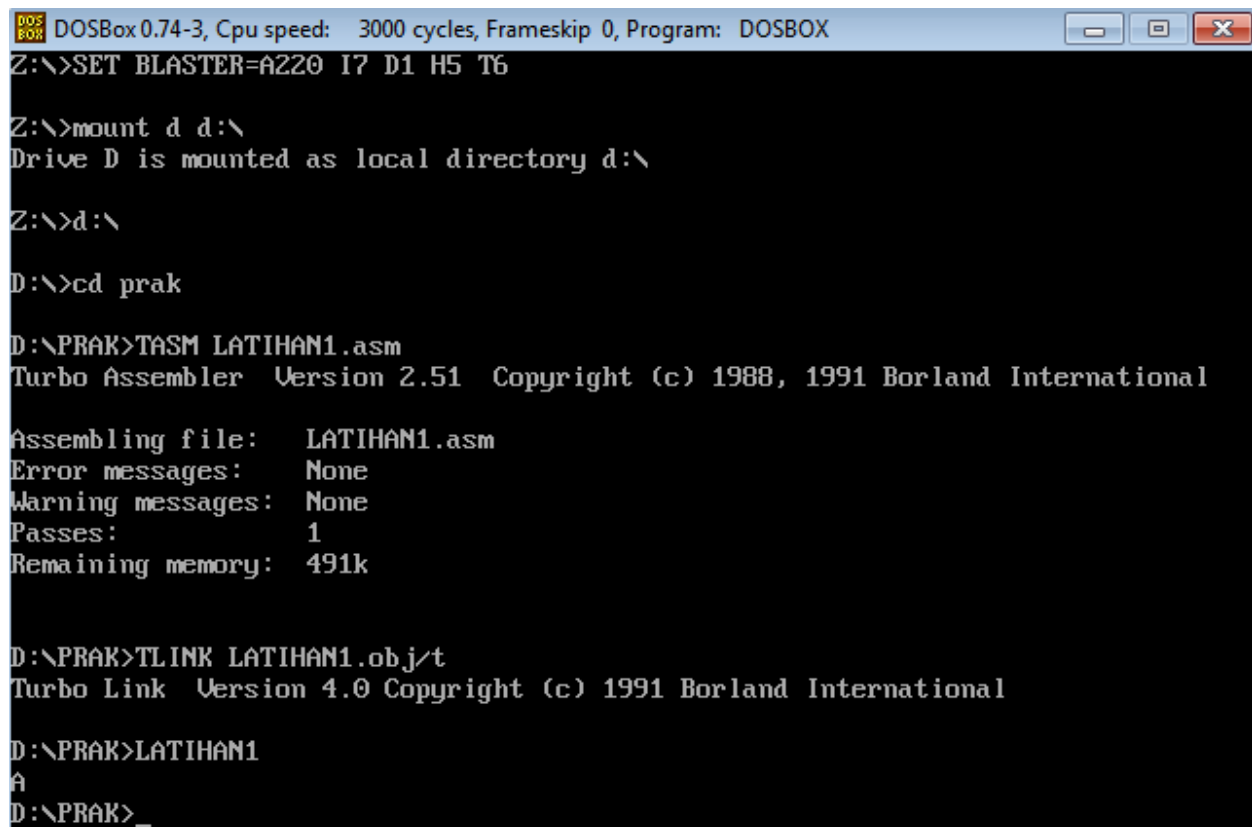
D:\PRAK>TASM LATIHAN1.asm
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International

Assembling file: LATIHAN1.asm
Error messages: None
Warning messages: None
Passes: 1
Remaining memory: 491k

D:\PRAK>TLINK LATIHAN1.obj/t
Turbo Link Version 4.0 Copyright (c) 1991 Borland International

D:\PRAK>
```

Mengubah ke file .com dengan TLINK.

A screenshot of a DOSBox window. The title bar reads "DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX". The command prompt shows the following sequence of commands and output:

```
Z:\>SET BLASTER=A220 I7 D1 H5 T6

Z:\>mount d d:\
Drive D is mounted as local directory d:\

Z:\>d:\

D:\>cd prak

D:\PRAK>TASM LATIHAN1.asm
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International

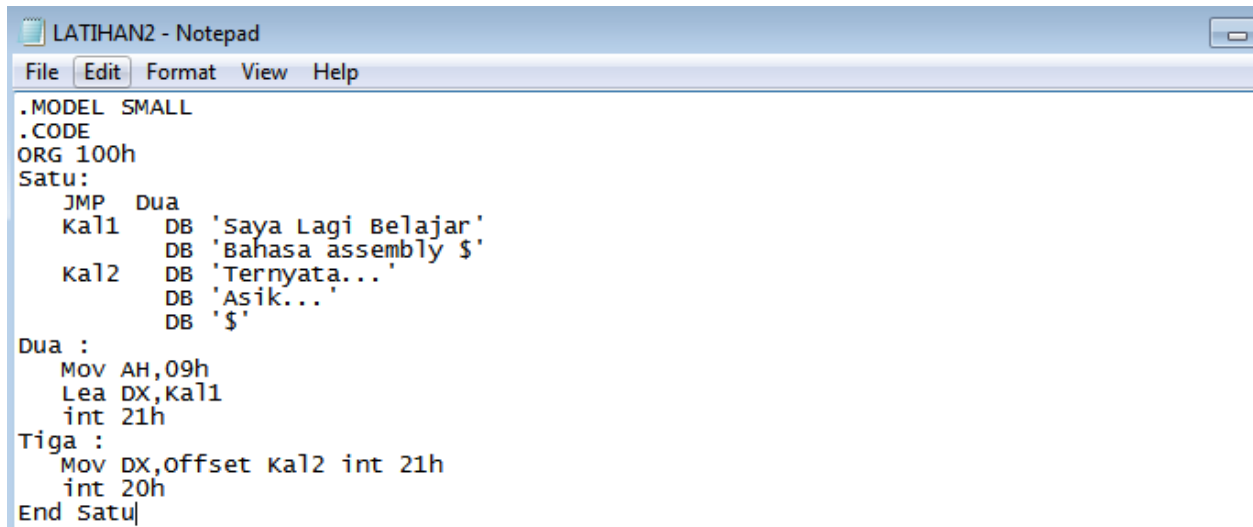
Assembling file: LATIHAN1.asm
Error messages: None
Warning messages: None
Passes: 1
Remaining memory: 491k

D:\PRAK>TLINK LATIHAN1.obj/t
Turbo Link Version 4.0 Copyright (c) 1991 Borland International

D:\PRAK>LATIHAN1
A
D:\PRAK>_
```

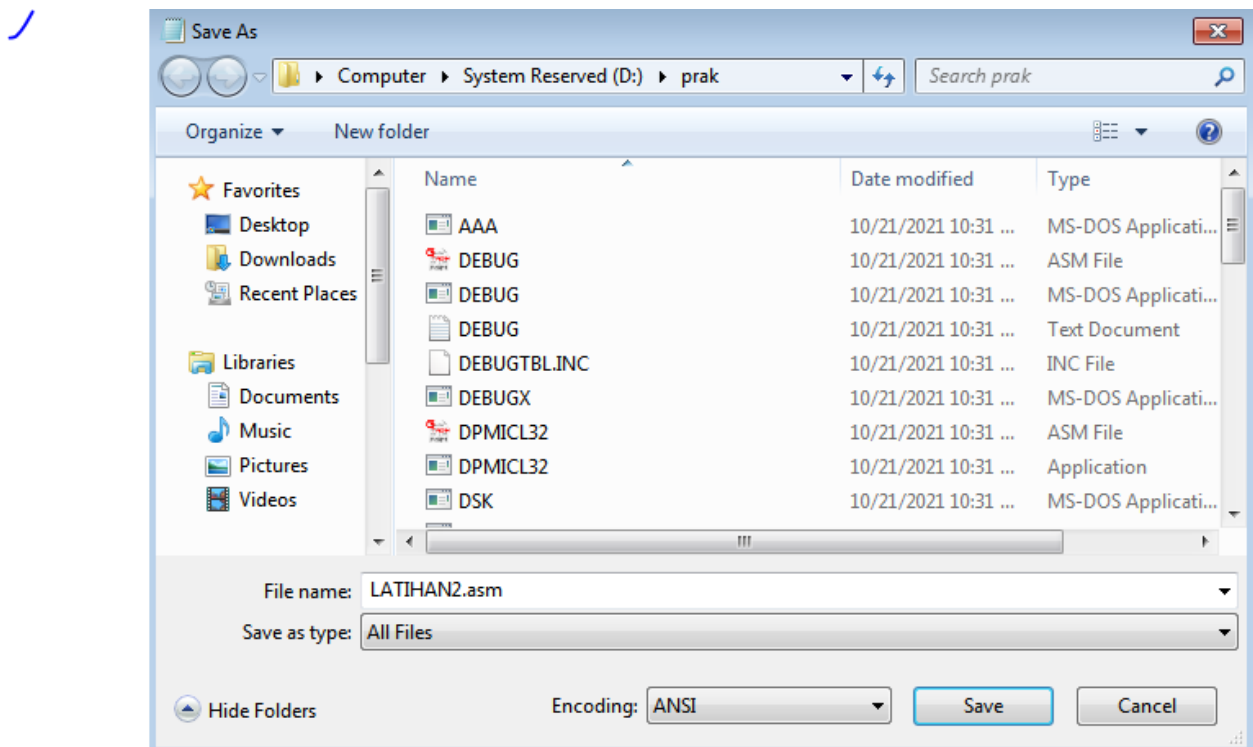
Menjalankan program dan menghasilkan "A"

PRAK III

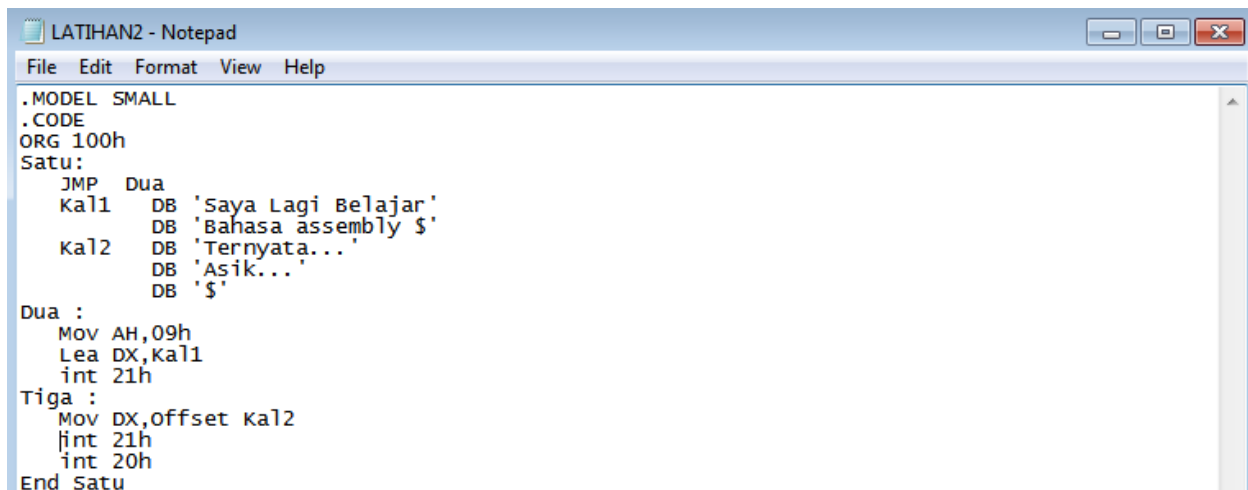


```
.MODEL SMALL
.CODE
ORG 100h
Satu:
    JMP Dua
    Kal1 DB 'Saya Lagi Belajar'
        DB 'Bahasa assembly $'
    Kal2 DB 'Ternyata...'
        DB 'Asik...'
        DB '$'
Dua :
    MOV AH,09h
    LEA DX,Kal1
    INT 21h
Tiga :
    MOV DX,offset Kal2
    INT 21h
End Satu
```

Menuliskan program

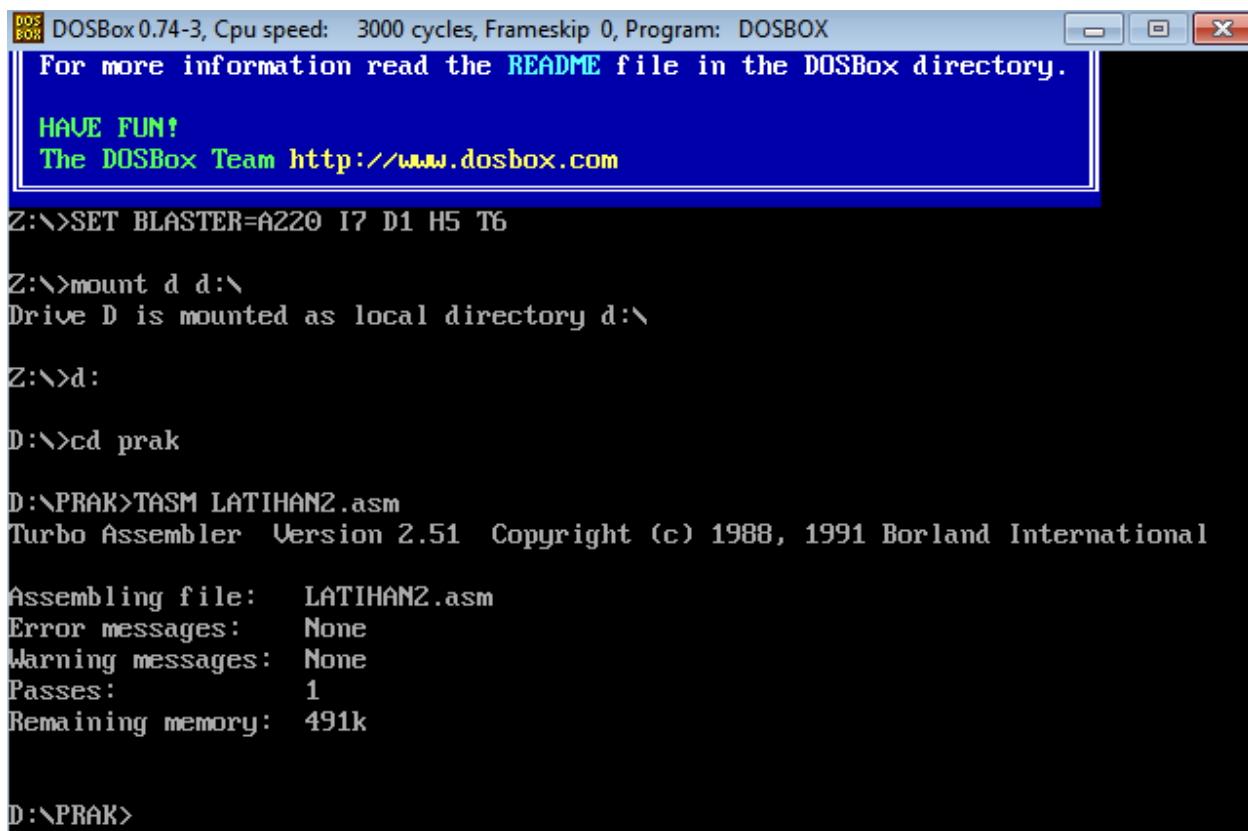


Menyimpan file ke D



```
.MODEL SMALL
.CODE
ORG 100h
Satu:
    JMP Dua
    Kal1 DB 'Saya Lagi Belajar'
        DB 'Bahasa assembly $'
    Kal2 DB 'Ternyata...'
        DB 'Asik...'
        DB '$'
Dua :
    MOV AH,09h
    LEA DX,Kal1
    INT 21h
Tiga :
    MOV DX,offset Kal2
    INT 21h
    INT 20h
End Satu
```

Saat dicompile error,mengubah program menjadi seperti di atas



```
DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX
For more information read the README file in the DOSBox directory.
HAVE FUN!
The DOSBox Team http://www.dosbox.com

Z:\>SET BLASTER=A220 I7 D1 H5 T6

Z:\>mount d d:\
Drive D is mounted as local directory d:\

Z:\>d:

D:\>cd prak

D:\PRAK>TASM LATIHAN2.asm
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International

Assembling file: LATIHAN2.asm
Error messages: None
Warning messages: None
Passes: 1
Remaining memory: 491k

D:\PRAK>
```

Mengubah ke file obj menggunakan TASM

```
DOS
BOX DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX
Z:\>mount d d:\
Drive D is mounted as local directory d:\

Z:\>d:

D:\>cd prak

D:\PRAK>TASM LATIHAN2.asm
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International

Assembling file: LATIHAN2.asm
Error messages: None
Warning messages: None
Passes: 1
Remaining memory: 491k

D:\PRAK>TLINK LATIHAN2.obj/t
Turbo Link Version 4.0 Copyright (c) 1991 Borland International
Fatal: Unable to open file 'latihan2.obj'

D:\PRAK>TLINK LATIHAN2.obj/t
Turbo Link Version 4.0 Copyright (c) 1991 Borland International

D:\PRAK>
```

Mengubah ke file .com

```
DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX

Z:\>d:

D:\>cd prak

D:\PRAK>TASM LATIHAN2.asm
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International

Assembling file: LATIHAN2.asm
Error messages: None
Warning messages: None
Passes: 1
Remaining memory: 491k

D:\PRAK>TLINK LATIHAN2.obj/t
Turbo Link Version 4.0 Copyright (c) 1991 Borland International
Fatal: Unable to open file 'latihan2.obj'

D:\PRAK>TLINK LATIHAN2.obj/t
Turbo Link Version 4.0 Copyright (c) 1991 Borland International

D:\PRAK>LATIHAN2
Saya Lagi Belajar Bahasa assembly Ternyata...Asik...
D:\PRAK>
```

Menjalankan dan hasil program