

**CONTOH LATIHAN BAHASA RAKITAN
YOGA PRIHASTOMO**

CATATAN DEBUG :

1. Program diketik dalam perintah debug pada command.com atau cmd.exe
2. Keterangan dibawah adalah help dari debug.

```
-?  
assemble      A [address]  
compare       C range address  
dump          D [range]  
enter         E address [list]  
fill          F range list  
go            G [=address] [addresses]  
hex           H value1 value2  
input         I port  
load          L [address] [drive] [firstsector] [number]  
move          M range address  
name          N [pathname] [arglist]  
output        O port byte  
proceed       P [=address] [number]  
quit          Q  
register       R [register]  
search        S range list  
trace         T [=address] [value]  
unassemble    U [range]  
write         W [address] [drive] [firstsector] [number]  
allocate expanded memory      XA [#pages]  
deallocate expanded memory    XD [handle]  
map expanded memory pages     XM [Lpage] [Ppage] [handle]  
display expanded memory status XS
```

```
=====  
C:\>DEBUG  
-A100  
158E:0100 MOV AH,02  
158E:0102 MOV DL,41  
158E:0104 INT 21  
158E:0106 INT 20  
158E:0108  
-G  
A  
Program terminated normally
```

```
=====  
-A100  
158E:0100 MOV AH,02  
158E:0102 MOV DL,41  
158E:0104 INT 21  
158E:0106 MOV DL,42  
158E:0108 INT 21  
158E:010A INT 20  
158E:010C  
-G  
AB  
Program terminated normally  
=====
```

```
C:\>DEBUG
-A100
158E:0100 MOV AH,02
158E:0102 MOV DL,41
158E:0104 INT 21
158E:0106 MOV DL,0A ;(NOL A)
158E:0108 INT 21
158E:010A MOV DL,42
158E:010C INT 21
158E:010E INT 20
158E:0110
-G
A
B
Program terminated normally
=====
```

```
-A100
158E:0100 MOV AH,02
158E:0102 MOV DL,41
158E:0104 INT 21
158E:0106 MOV DL,0A (NOL A)
158E:0108 INT 21
158E:010A MOV DL,0D (NOL D)
158E:010C INT 21
158E:010E MOV DL,42
158E:0110 INT 21
158E:0112 INT 20
158E:0114
-G
A
B
Program terminated normally
=====
```

```
C:\>DEBUG
-A100
0C21:0100 MOV AH,02
0C21:0102 MOV DL,41
0C21:0104 INT 21
0C21:0106 MOV DL,0A
0C21:0108 INT 21
0C21:010A MOV DL,0D
0C21:010C INT 21
0C21:010E MOV DL,20
0C21:0110 INT 21
0C21:0112 MOV DL,42
0C21:0114 INT 21
0C21:0116 MOV DL,0A
0C21:0118 INT 21
0C21:011A MOV DL,0D
0C21:011C INT 21
0C21:011E MOV DL,20
0C21:0120 INT 21
0C21:0122 INT 21
0C21:0124 MOV DL,43
0C21:0126 INT 21
0C21:0128 MOV DL,0A
0C21:012A INT 21
```

```
0C21:012C MOV DL,0D
0C21:012E INT 21
0C21:0130 MOV DL,20
0C21:0132 INT 21
0C21:0134 INT 21
0C21:0136 INT 21
0C21:0138 MOV DL,44
0C21:013A INT 21
0C21:013C MOV DL,0A
0C21:013E INT 21
0C21:0140 MOV DL,0D
0C21:0142 INT 21
0C21:0144 MOV DL,20
0C21:0146 INT 21
0C21:0148 INT 21
0C21:014A MOV DL,45
0C21:014C INT 21
0C21:014E MOV DL,0A
0C21:0150 INT 21
0C21:0152 MOV DL,0D
0C21:0154 INT 21
0C21:0156 MOV DL,20
0C21:0158 INT 21
0C21:015A MOV DL,46
0C21:015C INT 21
0C21:015E MOV DL,0A
0C21:0160 INT 21
0C21:0162 MOV DL,0D
0C21:0164 INT 21
0C21:0166 MOV DL,47
0C21:0168 INT 21
0C21:016A INT 20
0C21:016C
```

-G

A

B

C

D

E

F

G

Program terminated normally

=====

C:\>DEBUG

-A100

```
0C21:0100 MOV AH,02
0C21:0102 MOV DL,20
0C21:0104 INT 21
0C21:0106 INT 21
0C21:0108 INT 21
0C21:010A MOV DL,41
0C21:010C INT 21
0C21:010E MOV DL,0A
0C21:0110 INT 21
0C21:0112 MOV DL,0D
0C21:0114 INT 21
0C21:0116 MOV DL,20
0C21:0118 INT 21
```

```
0C21:011A INT 21
0C21:011C MOV DL,42
0C21:011E INT 21
0C21:0120 MOV DL,0A
0C21:0122 INT 21
0C21:0124 MOV DL,0D
0C21:0126 INT 21
0C21:0128 MOV DL,20
0C21:012A INT 21
0C21:012C MOV DL,43
0C21:012E INT 21
0C21:0130 MOV DL,0A
0C21:0132 INT 21
0C21:0134 MOV DL,0D
0C21:0136 INT 21
0C21:0138 MOV DL,44
0C21:013A INT 21
0C21:013C MOV DL,0A
0C21:013E INT 21
0C21:0140 MOV DL,0D
0C21:0142 INT 21
0C21:0144 MOV DL,20
0C21:0146 INT 21
0C21:0148 MOV DL,45
0C21:014A INT 21
0C21:014C MOV DL,0A
0C21:014E INT 21
0C21:0150 MOV DL,0D
0C21:0152 INT 21
0C21:0154 MOV DL,20
0C21:0156 INT 21
0C21:0158 INT 21
0C21:015A MOV DL,46
0C21:015C INT 21
0C21:015E MOV DL,0A
0C21:0160 INT 21
0C21:0162 MOV DL,0D
0C21:0164 INT 21
0C21:0166 MOV DL,20
0C21:0168 INT 21
0C21:016A INT 21
0C21:016C INT 21
0C21:016E MOV DL,47
0C21:0170 INT 21
0C21:0172 INT 20
0C21:0174
```

-G

A

B

C

D

E

F

G

Program terminated normally

=====

```
C:\>DEBUG
-A100
0C21:0100 MOV AH,02
0C21:0102 MOV CX,A
0C21:0105 MOV DL,41
0C21:0107 INT 21
0C21:0109 INC DL
0C21:010B LOOP 107
0C21:010D INT 21
0C21:010F
-G
ABCDEFGHIJK
Program terminated normally
=====
```

```
C:\>DEBUG
-A100
0C21:0100 MOV CX,05
0C21:0103 MOV AH,02
0C21:0105 MOV BL,31
0C21:0107 MOV DL,41
0C21:0109 INT 21
0C21:010B INC DL
0C21:010D PUSH DX
0C21:010E MOV DL,BL
0C21:0110 INT 21
0C21:0112 INC BL
0C21:0114 POP DX
0C21:0115 LOOP 109
0C21:0117 INT 20
0C21:0119
-G
A1B2C3D4E5
Program terminated normally
=====
```

```
C:\>DEBUG
-A100
0C21:0100 MOV CX,05
0C21:0103 MOV AH,02
0C21:0105 MOV DL,41
0C21:0107 INT 21
0C21:0109 MOV BL,31
0C21:010B INC DL
0C21:010D PUSH DX
0C21:010E MOV DL,BL
0C21:0110 INT 21
0C21:0112 INC DL
0C21:0114 INT 21
0C21:0116 INC DL
0C21:0118 INT 21
0C21:011A POP DX
0C21:011B LOOP 107
0C21:011D INT 20
0C21:011F
-G
A123B123C123D123E123
Program terminated normally
=====
```

```
C:\>DEBUG
-A100
0C21:0100 MOV CX,05
0C21:0103 MOV AH,02
0C21:0105 MOV DL,41
0C21:0107 INT 21
0C21:0109 PUSH CX
0C21:010A INC DL
0C21:010C PUSH DX
0C21:010D MOV CX,03
0C21:0110 MOV DL,31
0C21:0112 INT 21
0C21:0114 INC DL
0C21:0116 LOOP 112
0C21:0118 MOV DL,0A
0C21:011A INT 21
0C21:011C MOV DL,0D
0C21:011E INT 21
0C21:0120 POP DX
0C21:0121 POP CX
0C21:0122 LOOP 107
0C21:0124 INT 20
0C21:0126
```

```
-G
A123
B123
C123
D123
E123
```

Program terminated normally

```
=====  
C:\>DEBUG  
-A100  
1069:0100 MOV AH,02  
1069:0102 MOV CX,A  
1069:0105 MOV BX,1  
1069:0108 PUSH CX  
1069:0109 MOV CX,BX  
1069:010B MOV DL,41  
1069:010D INT 21  
1069:010F INC DL  
1069:0111 LOOP 10D  
1069:0113 INC BX  
1069:0114 POP CX  
1069:0115 MOV DL,A  
1069:0117 INT 21  
1069:0119 MOV DL,0D  
1069:011B INT 21  
1069:011D LOOP 108  
1069:011F INT 20  
1069:0121
```

```
-G  
A  
AB  
ABC  
ABCD  
ABCDE  
ABCDEF
```

ABCDEFGF
ABCDEFGFH
ABCDEFGFHI
ABCDEFGFHIJ
Program terminated normally

=====

-A100
158E:0100 MOV AH,02
158E:0102 MOV CX,1A
158E:0105 MOV DL,5A
158E:0107 INT 21
158E:0109 DEC DL
158E:010B LOOP 107
158E:010D INT 20
158E:010F
-G
ZYXWVUTSRQPONMLKJIHGFEDCBA
Program terminated normally

=====

-A100
0B36:0100 MOV AH,02
0B36:0102 MOV CX,A
0B36:0105 MOV BX,1
0B36:0108 MOV SI,13
0B36:010B MOV DH,41
0B36:010D PUSH CX
0B36:010E MOV CX,BX
0B36:0110 MOV DL,20
0B36:0112 INT 21
0B36:0114 LOOP 112
0B36:0116 INC BX
0B36:0117 MOV CX,SI
0B36:0119 MOV DL,DH
0B36:011B INT 21
0B36:011D LOOP 11B
0B36:011F DEC SI
0B36:0120 DEC SI
0B36:0121 INC DH
0B36:0123 MOV DL,0A
0B36:0125 INT 21
0B36:0127 MOV DL,0D
0B36:0129 INT 21
0B36:012B POP CX
0B36:012C LOOP 10D
0B36:012E INT 20
0B36:0130

-G
AAAAAAAAAAAAAAAAAAAAA
BBBBBBBBBBBBBBBBBBB
CCCCCCCCCCCCCCC
DDDDDDDDDDDDDD
EEEEEEEEEEEE
FFFFFFFFF
GGGGGGG
HHHHH
III
J

-A100

```
0B36:0100 MOV AH,02
0B36:0102 MOV CX,9
0B36:0105 MOV SI,9
0B36:0108 MOV DI,1
0B36:010B MOV DH,41
0B36:010D MOV BL,31
0B36:010F PUSH CX
0B36:0110 MOV CX,SI
0B36:0112 MOV DL,20
0B36:0114 INT 21
0B36:0116 LOOP 114
0B36:0118 DEC SI
0B36:0119 MOV CX,DI
0B36:011B MOV DL,DH
0B36:011D INT 21
0B36:011F LOOP 11D
0B36:0121 INC DI
0B36:0122 INC DH
0B36:0124 INC DH
0B36:0126 MOV DL,BL
0B36:0128 INT 21
0B36:012A INC BL
0B36:012C MOV DL,0A
0B36:012E INT 21
0B36:0130 MOV DL,0D
0B36:0132 INT 21
0B36:0134 POP CX
0B36:0135 LOOP 10F
0B36:0137 INT 20
0B36:0139
```

-G

```
    A1
    CC2
    EEE3
    GGGG4
    IIIII5
    KKKKKK6
    MMMMMMM7
    OOOOOOOO8
    QQQQQQQQQ9
```

=====

-A100

```
0B36:0100 MOV AH,02
0B36:0102 MOV CX,A
0B36:0105 MOV DL,20
0B36:0107 INT 21
0B36:0109 LOOP 107
0B36:010B MOV DL,30
0B36:010D INT 21
0B36:010F MOV DL,0A
0B36:0111 INT 21
0B36:0113 MOV DL,0D
0B36:0115 INT 21
0B36:0117 MOV CX,9
0B36:011A MOV SI,9
0B36:011D MOV BX,1
0B36:0120 MOV DH,31
```

```
0B36:0122 PUSH CX
0B36:0123 MOV CX,SI
0B36:0125 MOV DL,20
0B36:0127 INT 21
0B36:0129 LOOP 127
0B36:012B DEC SI
0B36:012C MOV CX,BX
0B36:012E MOV DL,41
0B36:0130 INT 21
0B36:0132 INC DL
0B36:0134 LOOP 130
0B36:0136 INC BX
0B36:0137 MOV DL,DH
0B36:0139 INT 21
0B36:013B INC DH
0B36:013D MOV DL,0A
0B36:013F INT 21
0B36:0141 MOV DL,0D
0B36:0143 INT 21
0B36:0145 POP CX
0B36:0146 LOOP 122
0B36:0148 INT 20
0B36:014A
```

-G

```
0
A1
AB2
ABC3
ABCD4
ABCDE5
ABCDEF6
ABCDEFG7
ABCDEFGH8
ABCDEFGHI9
```

-A100

```
0B36:0100 MOV AH,02
0B36:0102 MOV CX,9
0B36:0105 MOV SI,1
0B36:0108 MOV DI,9
0B36:010B MOV BL,41
0B36:010D MOV DH,39
0B36:010F PUSH CX
0B36:0110 MOV CX,SI
0B36:0112 MOV DL,20
0B36:0114 INT 21
0B36:0116 LOOP 114
0B36:0118 INC SI
0B36:0119 MOV CX,DI
0B36:011B MOV DL,BL
0B36:011D INT 21
0B36:011F INC DL
0B36:0121 LOOP 11D
0B36:0123 DEC DI
0B36:0124 INC BL
0B36:0126 MOV DL,DH
0B36:0128 INT 21
0B36:012A DEC DH
```

```
0B36:012C MOV DL,0A
0B36:012E INT 21
0B36:0130 MOV DL,0D
0B36:0132 INT 21
0B36:0134 POP CX
0B36:0135 LOOP 10F
0B36:0137 MOV CX,A
0B36:013A MOV DL,20
0B36:013C INT 21
0B36:013E LOOP 13C
0B36:0140 MOV DL,30
0B36:0142 INT 21
0B36:0144 INT 20
0B36:0146
```

-G

```
ABCDEFGHI9
BCDEFGHI8
CDEFGHI7
DEFGHI6
EFGHI5
FGHI4
GHI3
HI2
I1
0
```

=====
-A100

```
0B34:0100 MOV AH,02
0B34:0102 MOV CX,5
0B34:0105 MOV SI,3
0B34:0108 MOV BL,31
0B34:010A MOV DL,41
0B34:010C PUSH CX
0B34:010D INT 21
0B34:010F INC DL
0B34:0111 PUSH DX
0B34:0112 MOV CX,SI
0B34:0114 MOV DL,BL
0B34:0116 INT 21
0B34:0118 INC BL
0B34:011A LOOP 114
0B34:011C POP DX
0B34:011D POP CX
0B34:011E LOOP 10C
0B34:0120 INT 20
0B34:0122
```

-G

```
A123B456C789D:;<E=>?
Program terminated normally
```

=====
D:\>DEBUG

-A100

```
0B34:0100 MOV AH,02
0B34:0102 MOV CX,3
0B34:0105 MOV SI,3
0B34:0108 MOV BL,31
0B34:010A MOV DL,41
```

```

0B34:010C  PUSH CX
0B34:010D  INT  21
0B34:010F  INC  DL
0B34:0111  PUSH DX
0B34:0112  MOV  CX,SI
0B34:0114  MOV  DL,BL
0B34:0116  INT  21
0B34:0118  INC  BL
0B34:011A  LOOP 114
0B34:011C  POP  DX
0B34:011D  POP  CX
0B34:011E  LOOP 10C
0B34:0120  MOV  CX,2
0B34:0123  MOV  SI,3
0B34:0126  MOV  DL,44
0B34:0128  MOV  BL,31
0B34:012A  PUSH CX
0B34:012B  INT  21
0B34:012D  INC  DL
0B34:012F  PUSH DX
0B34:0130  MOV  CX,SI
0B34:0132  MOV  DL,BL
0B34:0134  INT  21
0B34:0136  INC  BL
0B34:0138  LOOP 132
0B34:013A  POP  DX
0B34:013B  POP  CX
0B34:013C  LOOP 12A
0B34:013E  INT  20
0B34:0140

```

-G

A123B456C789D123E456

Program terminated normally

```

=====
158E:0100  B402          MOV     AH,02
158E:0102  B91A00       MOV     CX,001A
158E:0105  B241         MOV     DL,41
158E:0107  CD21         INT     21
158E:0109  FEC2         INC     DL
158E:010B  52          PUSH    DX
158E:010C  B20A         MOV     DL,0A
158E:010E  CD21         INT     21
158E:0110  5A          POP     DX
158E:0111  E2F4         LOOP   0107
158E:0113  CD20         INT     20

```

-G

A

B

C

D

E

F

G

H

I

J

K

L

M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

Program terminated normally

=====

```
D:\>DEBUG
-A100
0B34:0100 MOV AH,02
0B34:0102 MOV CX,1A
0B34:0105 MOV SI,1A
0B34:0108 MOV BL,5A
0B34:010A MOV DL,20
0B34:010C PUSH CX
0B34:010D MOV CX,SI
0B34:010F INT 21
0B34:0111 LOOP 10F
0B34:0113 PUSH DX
0B34:0114 DEC SI
0B34:0115 MOV DL,BL
0B34:0117 INT 21
0B34:0119 DEC BL
0B34:011B MOV DL,0A
0B34:011D INT 21
0B34:011F MOV DL,0D
0B34:0121 INT 21
0B34:0123 POP DX
0B34:0124 POP CX
0B34:0125 LOOP 10C
0B34:0127 INT 20
0B34:0129
```

-G

L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

A
B
C
D
E
F
G
H
I
J
K

Program terminated normally

=====

CATATAN TURBO ASSEMBLER :

1. Harus ada kompiler Turbo Assembler (TASM.EXE) dan Linking File (TLINK.EXE)
2. Cara kompilasi
 - Masuk direktori Turbo Assembler, Misal C:\TASM
 - Buat file .ASM dengan editor seperti EDIT atau Notepad dan simpan dengan ekstensi .ASM
 - Letakkan file .ASM sama dengan direktori file TASM.EXE
 - Setelah selesai, TASM <Nama_File.ASM>
 - Jika terdapat error, perbaiki file .ASM
 - Jika tidak error, maka lanjutkan dengan TLINK/t <Nama_File>
 - Jika tidak ada error, maka akan terbentuk file .COM, nah file inilah yang siap dieksekusi.

```
=====
SATU.ASM
p8086
model tiny
dataseg
codeseg
startupcode
    mov ah,02h
    mov dl,41h
    int 21h
    mov dl,42h
    int 21h
    int 20h
end
=====
```

```
DUA.ASM
p8086
model tiny
dataseg
    kata1 db 'Teknik Informatika',13,10,'$'
    kata2 db 'STT-PLN','$'
codeseg
startupcode
    mov ah,09h
    mov dx,offset kata1
    int 21h
    lea dx, kata2 ;load effective address
    int 21h
    int 20h
end
=====
```

```
TIGA.ASM
p8086
model tiny
dataseg
    kalimat db 'Lab TI',13,10
            db '(tekan enter untuk kembali ke DOS)',13,10,'$'
codeseg
startupcode
    proses:
        mov ah,09
        lea dx,kalimat
        int 21h
        mov ah,0
```

```

        int 16h
        cmp al,13
        je exit
        jmp proses
exit:
        int 20h
end
=====

```

```

EMPAT.ASM
p8086
model tiny
dataseg
        tanya db 'masukan kalimat: $'
        crlf db 13,10,'$'
        tampung db 12,?,12 dup(?)
codeseg
startupcode
        mov ah,09h
        lea dx,tanya
        int 21h
        mov ah,0ah
        mov dx,offset tampung
        int 21h
        xor bx,bx
        mov bl,byte ptr ds:[tampung]+1
        mov byte ptr ds:[tampung+2+bx],'$'
        mov ah,09h
        lea dx,crlf
        int 21h
        mov dx,offset tampung + 2
        int 21h
        int 20h
end
=====

```

```

LIMA.ASM
p8086
model tiny
dataseg
        tampung db ?,?, '$'
        tambah db '+$'
        sdengan db '='
codeseg
startupcode
        mov ah,01
        int 21h
        sub al,30h
        xor ah,ah
        push ax
        mov ah,09
        lea dx,tambah
        int 21h
        mov ah,01
        int 21h
        mov bl,al
        sub bl,30h
        mov ah,09
        lea dx,sdengan

```

```

    int 21h
    pop ax
    add al,bl
    aaa
    add ax,3030h
    mov byte ptr [tampung],ah
    mov byte ptr [tampung+1],al
    mov dx,offset tampung
    mov ah,09
    int 21h
    int 20h
end
=====

```

```

ENAM.ASM
p8086
model tiny
dataseg
    tfile db 'nama file:$'
    tkata db 'kalimat:$'
    crlf db 13,10,'$'
    nfile db 11,?,12 dup(?)
    kata db 40,?,41 dup(?)
codeseg
startupcode
    mov ah,09h
    lea dx,tfile
    int 21h
    mov ah,0ah
    lea dx,nfile
    int 21h
    xor bx,bx
    mov bl, byte ptr ds:[nfile]+1
    mov byte ptr ds:[nfile+2+bx],00h
    mov ah,3ch
    mov cx,0
    lea dx,nfile+2
    int 21h
    mov bx,ax
    push bx
    mov ah,09h
    lea dx,crlf
    int 21h
    lea dx,tkata
    int 21h
    mov ah,0ah
    lea dx,kata
    int 21h
    xor bx,bx
    mov bl,byte ptr ds:[kata]+1
    mov byte ptr ds:[kata+2+bx],'$'
    mov cx,bx
    mov ah,40h
    mov dx,offset kata+2
    pop bx
    int 21h
    int 20h
end
=====

```

```

TUJUH.ASM
p8086
model tiny
codeseg
startupcode
    mov cx,9
    mov bh,1
loop1:  mov dl,bh
        add dl,30h
        mov ah,02
        int 21h
        mov dl,2ah ; *
        int 21h
        mov dl,31h ; 1
        int 21h
        mov dl,3dh
        int 21h
        mov al,01
        mul bh
        mov dl,al
        add dl,30h
        mov ah,02
        int 21h
        mov dl,0ah
        int 21h
        mov dl,0dh
        int 21h
        inc bh
        loop loop1
        int 20h
end
=====

```

```

DELAPAN.ASM
p8086
model tiny
dataseg
    kata db ' Informatika STT-PLN Jakarta $'
    nfile db 'filecoba.dat',0 ;nilai nol untuk pembatas file yg dibuat
codeseg
startupcode
    mov ah,3ch
    mov cx,0
    lea dx,nfile
    int 21h
    mov ah,3dh
    mov al,02
    int 21h
    mov bx,ax
    mov dx,offset kata
    mov cx,32
    mov ah,40h
    int 21h
    mov ah,4ch
    int 21h
end
=====

```

```

SEMBILAN.ASM
p8086
model tiny
dataseg
codeseg
startupcode
    cmp byte ptr ds:[80h],2
    jl selesai
    mov ax,0b800h
    mov es,ax
    mov cx,2000
    mov bx,0
    mov dl,byte ptr ds:[82h]
ulang:
    cmp byte ptr es:[bx],dl
    jne lanjut
    mov dh,dl
    cmp dh,'A'
    jl bknhuruf
    cmp dh,'Z'
    jle ubah
    cmp dh,'a'
    jl bknhuruf
    cmp dh,'z'
    jle ubah
    jmp bknhuruf
ubah:
    xor dh,32
bknhuruf:
    mov byte ptr es:[bx],dh
    mov byte ptr es:[bx+1],0ah
lanjut:
    inc bx
    inc bx
    loop ulang
selesai:
    int 20h
end

```

=====

```

SEPULUH.ASM
P8086
model tiny
codeseg
startupcode
    mov cx,0ah
    mov ah,02
    mov bl,30h
loop2 : push cx
        mov bh,30h
        mov cx,0ah
loop1 : mov dl,bl
        int 21h
        mov dl,bh
        int 21h
        mov dl,20h
        int 21h
        inc bh
        loop loop1

```

```

        pop cx
        inc bx
        mov dl,13
        int 21h
        mov dl,0ah
        int 21h
        loop loop2
        int 20h
end
=====

```

```

SEBELAS.ASM
p8086
model tiny
codeseg
startupcode
        mov cx,9
        mov bh,1
loop1 : mov dl,bh
        add dl,30h
        mov ah,02
        int 21h
        mov dl,2ah
        int 21h
        mov dl,31h
        int 21h
        mov dl,3dh
        int 21h
        mov al,01
        mul bh
        mov dl,al
        add dl,30h
        mov ah,02
        int 21h
        mov dl,0ah
        int 21h
        mov dl,0dh
        int 21h
        inc bh
        loop loop1
        int 20h
end
=====

```

```

DUABELAS.ASM
p8086
model tiny
dataseg
        kata db 'INFORMATIKA'
codeseg
startupcode
        mov ax,0b800h
        mov es,ax
        mov cx,11
        xor bx,bx
        xor si,si
        ulang:
        mov dl,byte ptr ds:[kata+si]
        mov byte ptr es:[bx],dl

```

```

        inc si
        inc bx
        inc bx
        loop ulang
        int 20h
end
=====

```

TIGABELAS.ASM

p8086

model tiny

dataseg

```

        info1 db 'Password Accepted',13,10,'$'
        info2 db 'Password ? ',13,10,'$'

```

codeseg

startupcode

```

        mov ah,09
        lea dx,info2
        int 21h

```

mulai:

```

        mov ah,07h
        int 21h
        cmp al,42h
        je pass1
        cmp al,62h
        jne mulai

```

pass1:

```

        mov ah,07h
        int 21h
        cmp al,4ch
        je pass2
        cmp al,6ch
        jne mulai

```

pass2:

```

        mov ah,07h
        int 21h
        cmp al,41h
        je pass3
        cmp al,61h
        jne mulai

```

pass3:

```

        mov ah,07h
        int 21h
        cmp al,4eh
        je pass4
        cmp al,6eh
        jne mulai

```

pass4:

```

        mov ah,07h
        int 21h
        cmp al,4bh
        je benar
        cmp al,6bh
        jne mulai

```

benar:

```

        mov ah,09h
        lea dx,info1
        int 21h
        int 20h

```

end

=====

EMPATBELAS.ASM

p8086

model tiny

dataseg

tfile db 'Nama File : \$'

tkata db 'Kalimat : \$'

crlf db 13,10,'\$'

nfile db 11,?,12 dup(?)

kata db 40,?,41 dup(?) ;maks 40 karakter ditulis

codeseg

startupcode

mov ah,09h

lea dx,tfile

int 21h

mov ah,0ah ;input string di reg dx

lea dx,nfile

int 21h

xor bx,bx

mov bl,byte ptr ds:[nfile]+1 ; ds(base segmen)

mov byte ptr ds:[nfile+2+bx],00h

mov ah,3ch

mov cx,0

lea dx,nfile+2

int 21h

mov bx,ax

push bx

mov ah,09h

lea dx,crlf

int 21h

lea dx,tkata

int 21h

mov ah,0ah

lea dx,kata

int 21h

xor bx,bx

mov bl,byte ptr ds:[kata]+1

mov byte ptr ds:[kata+2+bx],'\$'

mov cx,bx

mov ah,40h ;write proses

mov dx,offset kata+2

pop bx

int 21h

int 20h ; jika file besar gunakan 4ch

end

=====