LAPORAN PRAKTIKUM DASAR SISTEM KOMPUTER



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

PROGRAM STUDI TEKNIK INFORMATIKA

FAKULTAS TEKNOLOGI INDUSTRI

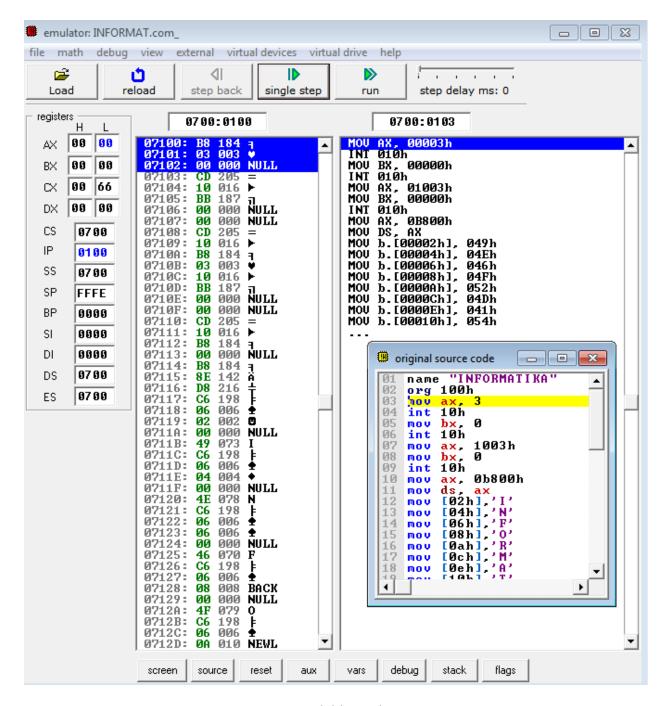
UNIVERSITAS AHMAD DAHLAN

DESEMBER 2021

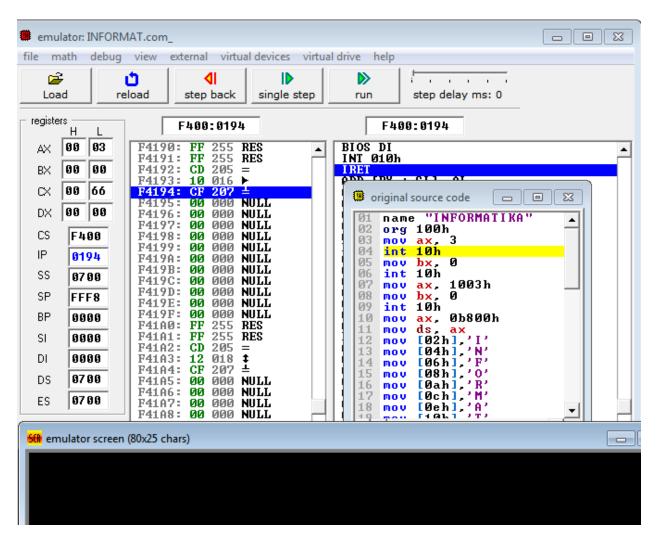
POSTEST I

```
original source code
           name "INFORMATIKA"
org 100h
hov ax, 3
int 10h
mov bx, 0
int 10h
   03
   04
   05
   06
                             ax, 1003h
   07
              mov
   08
              mov
                                             Ø
   09
             int 10h
           mov ax, 0b8001
mov ds, ax
mov [02h], 'I'
mov [04h], 'N'
mov [06h], 'F'
mov [08h], 'O'
mov [0ah], 'R'
mov [0ch], 'A'
mov [10h], 'I'
mov [12h], 'I'
mov [12h], 'I'
mov [16h], 'A'
mov [18h], 'E'
mov cx, 12
mov di, 03h
c: mov [di],
                              ax, 0b800h
   10
            mov
   \frac{11}{12}
   13
   14
15
   16
   17
18
19 mov [10h]
20 mov [12h]
21 mov [14h]
22 mov [16h]
23 mov [18h]
24 mov cx, 1
25 mov di, 0
26 c: mov |
27 add di, 2
28 loop c
29 mov ah, 0
30 int 16h
31 Ret
32
33
   19
              c: mov [di], 1110100b
add di, 2
```

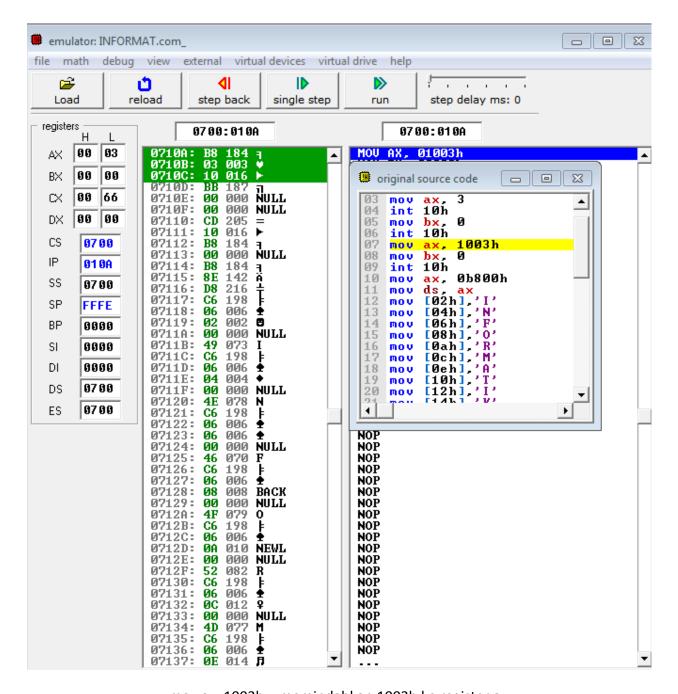
Sc code praktik 8



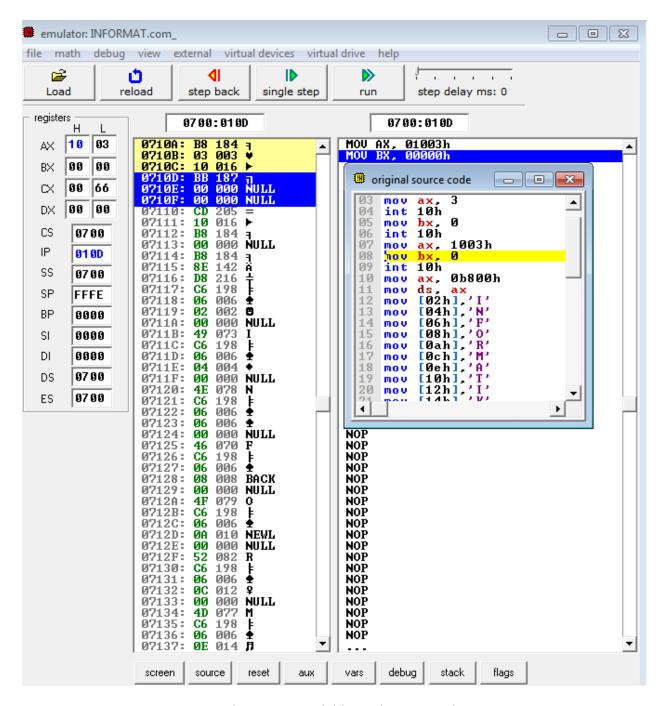
Mov ax,3=memindahkan 3 ke register ax.



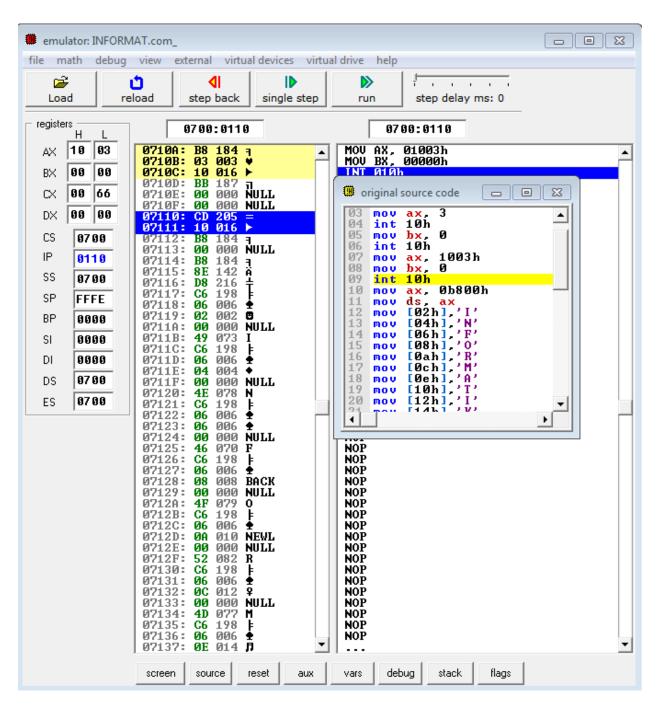
Int 10h=memanggil bios,menyetel mode video ke text mode dengan 80x25 karakter dan 16 warna.(mengacu ke mov ax,3)



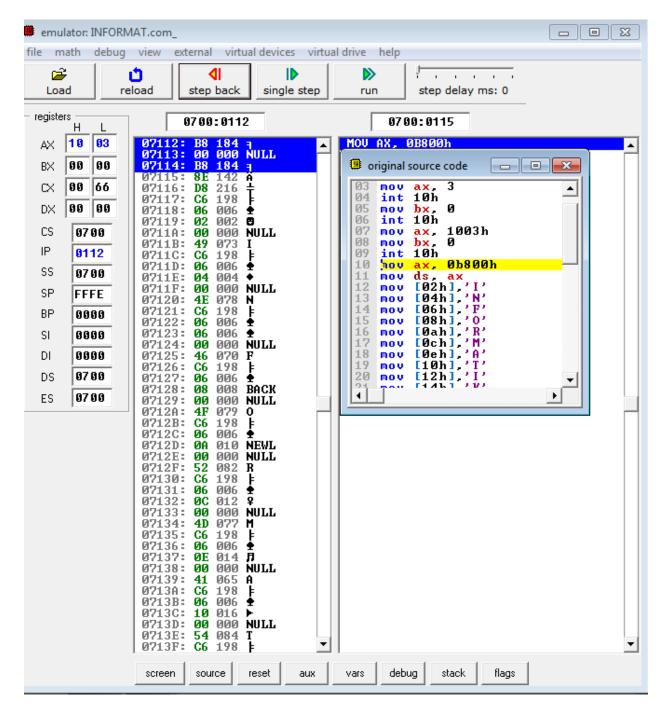
mov ax, 1003h = memindahkan 1003h ke register ax



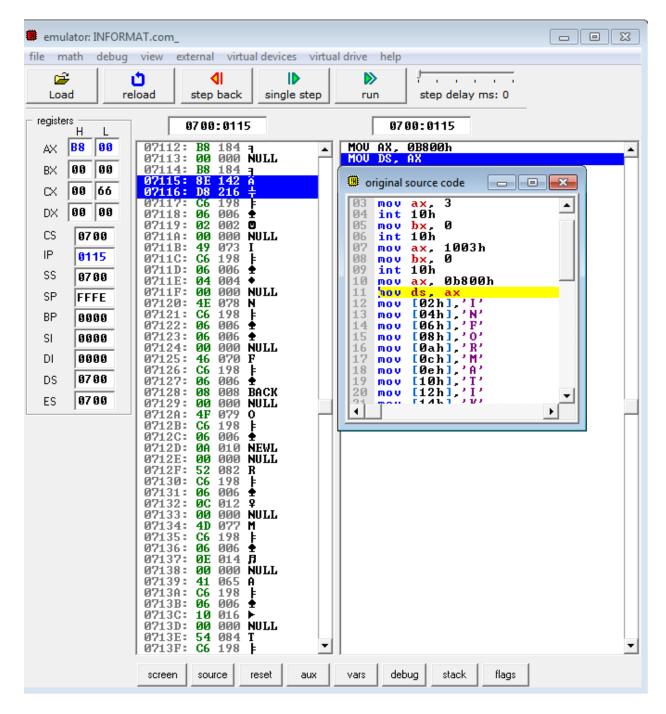
mov bx, 0=memindahkan 0 ke register bx



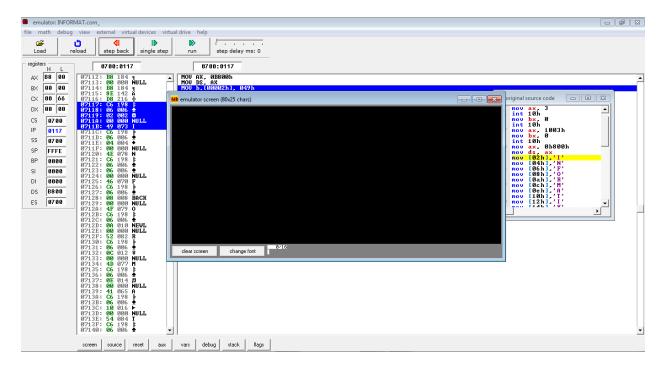
Int 10h=memberikan kedip ke background intensitas diaktifkan/mode berkedip aktif(mengacu ke mov ax,10003h)



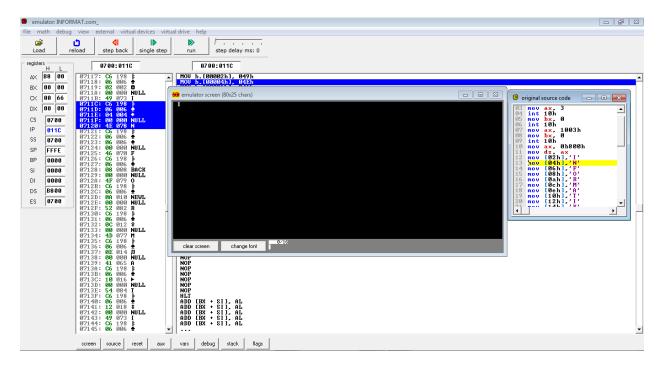
mov ax, 0b800h=memindahkan0b800h ke ax(mode text)



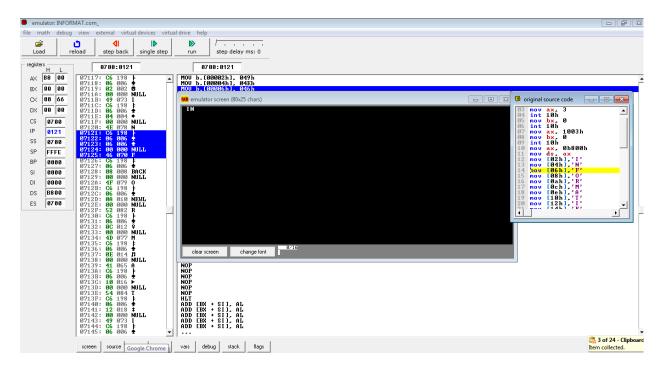
mov ds, ax=memindahkan ax ke ds.



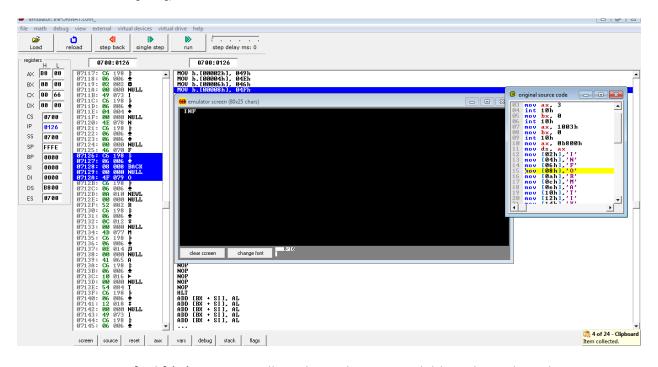
mov [02h],'I'=Memindahkan char I ke 02h



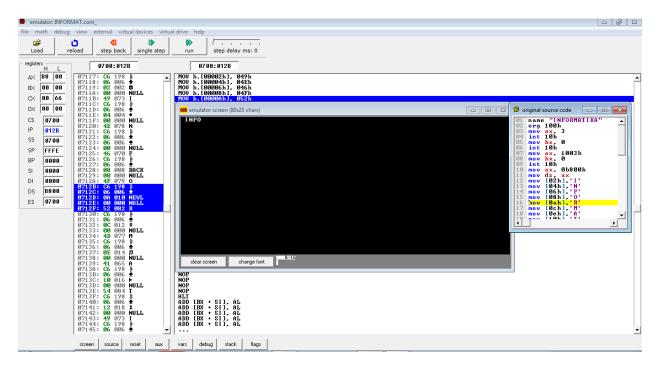
mov [04h], 'N'=Memunculkan char I dan memindahkan char n ke 04h



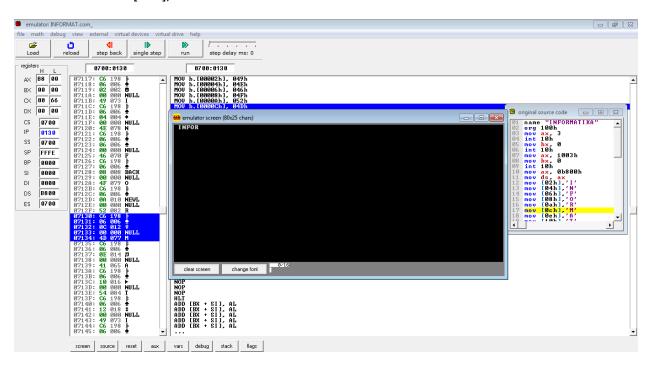
mov [06h], 'F' = Memunculkan char N dan memindahkan char F ke 06h



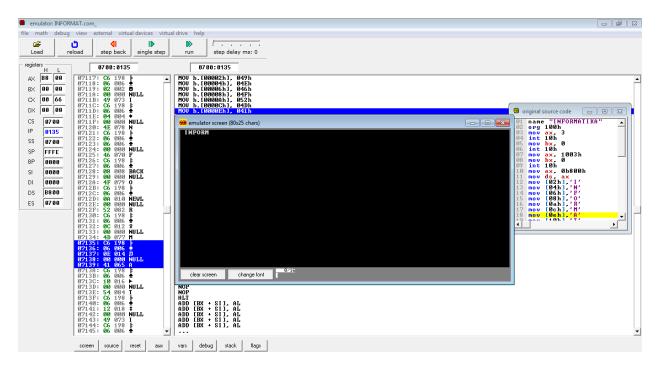
mov [08h],'O' =Memunculkan char F dan memindahkan char O ke 08h



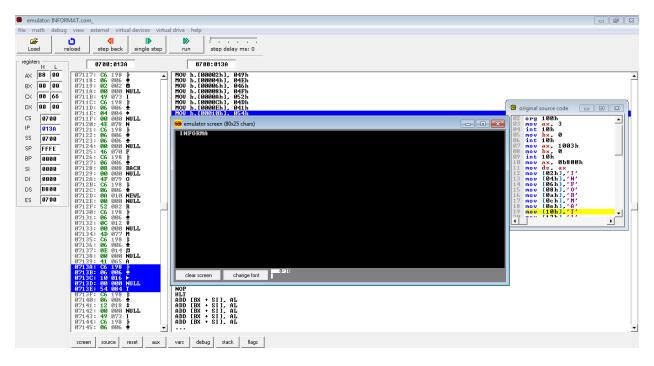
mov [0ah],'R'=Memunculkan char O dan memindahkan char R ke 0ah



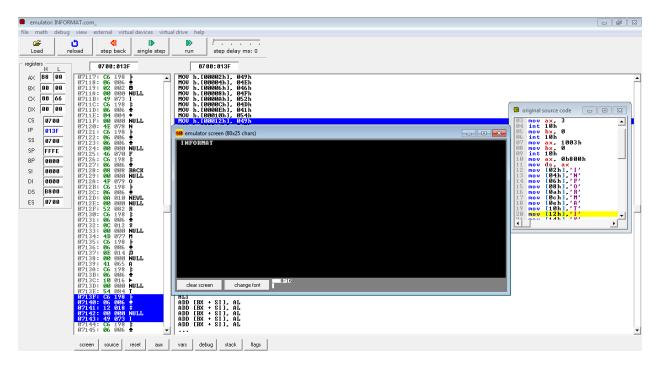
mov [0ch], 'M'=Memunculkan char R dan memindahkan char M ke 0ch



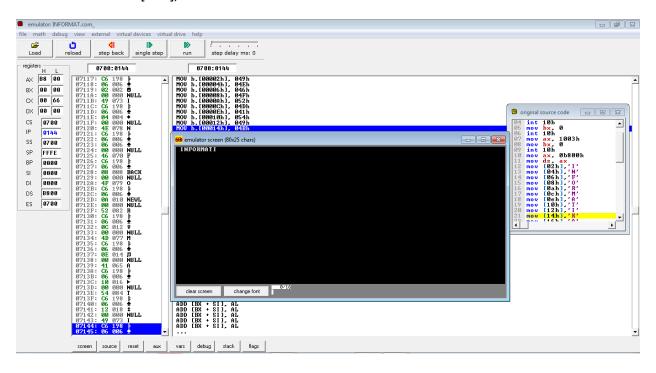
mov [0eh],'A=Memunculkan char M dan memindahkan char A ke 0eh



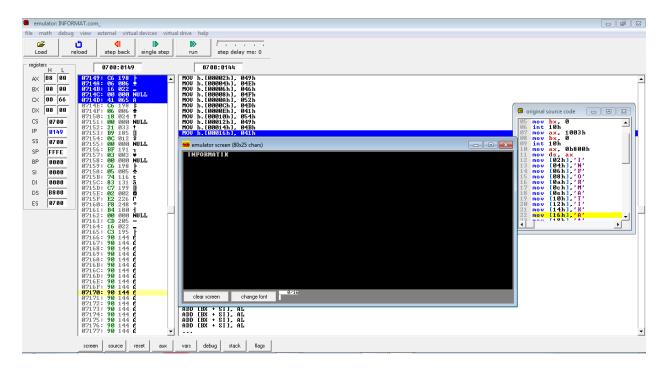
mov [10h],'T'=Memunculkan char A dan memindahkan char T ke 10h



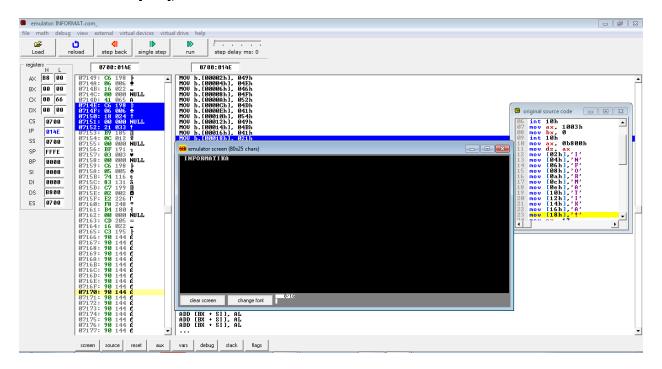
mov [12h],'I'=Memunculkan char T dan memindahkan char I ke 12h



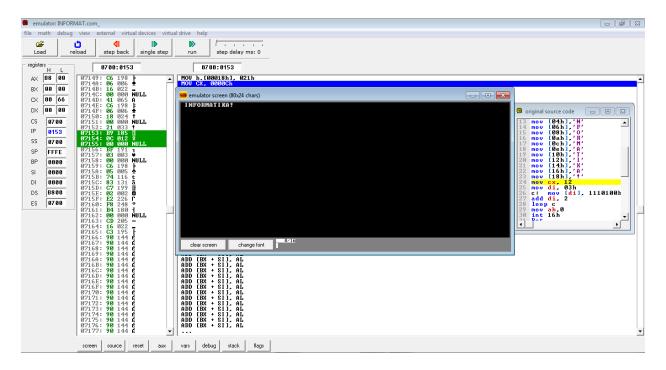
mov [14h],'K'=Memunculkan char I dan memindahkan char K ke 14h



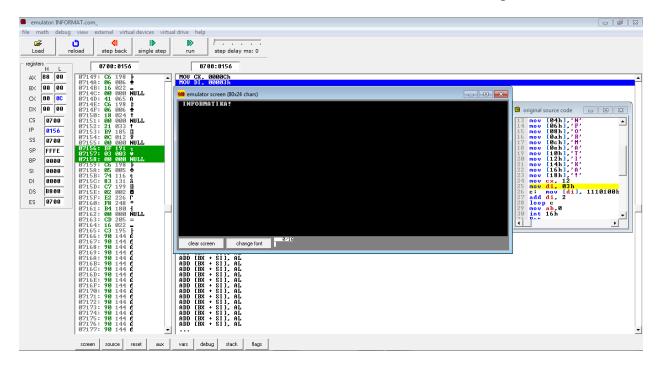
mov [16h],'A'=Memunculkan char K dan memindahkan char A ke 16h



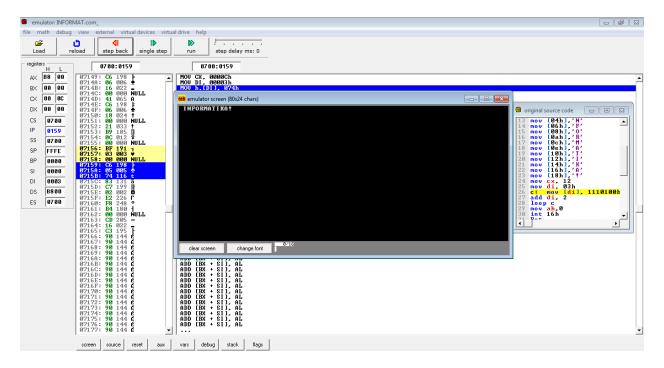
mov [18h],'!'=Memunculkan char A dan memindahkan char! ke 18h



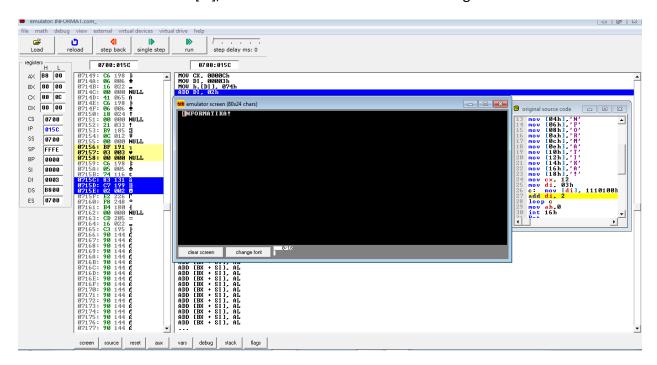
mov cx, 12=memunculkan char! dan memindahkan 12 ke register cx



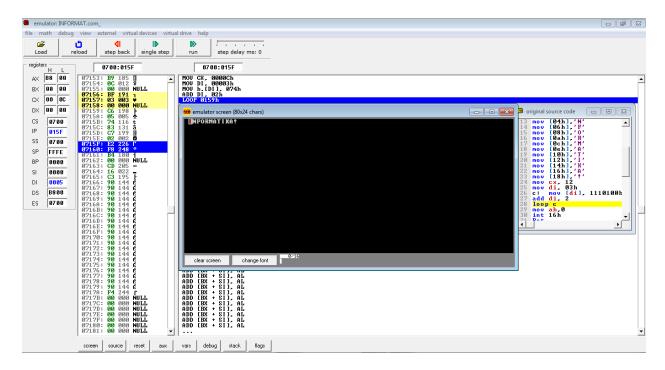
mov di, 03h=memindahkan 03h ke register di



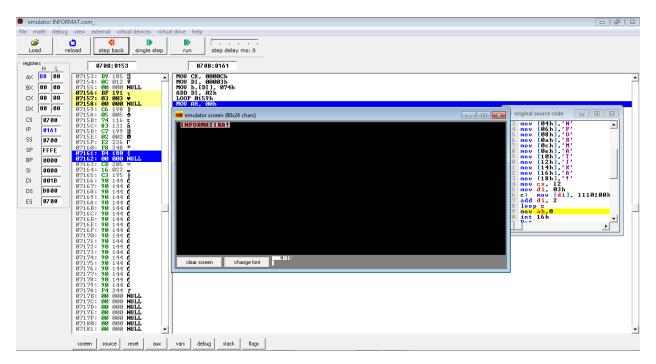
c: mov [di], 1110100b=memindahkan 074h ke register di



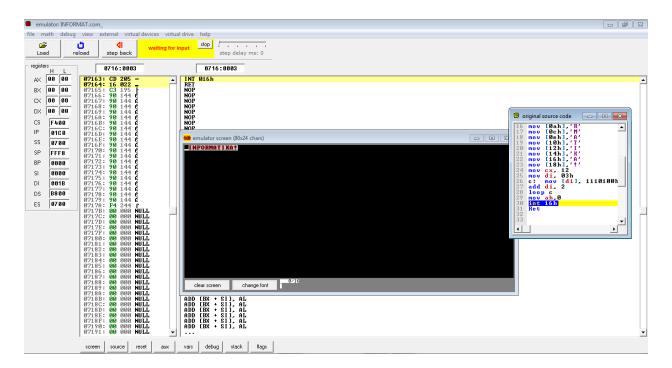
add di,2= Menambahkan 2 ke register di dan memberi warna



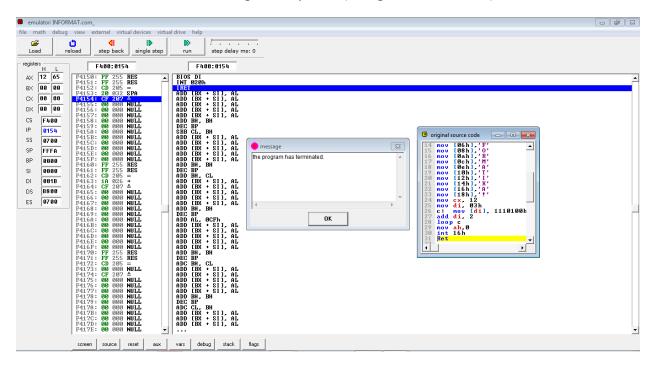
Loop c=mengulang pada dimulai pada c: dan kebawah (hingga loop) sebanyak 12 kali(mengacu pada mov cx,12)(INFORMATIKA!)



Mov ah,0=memindahkan nilai 0 ke ah



Int 16h=mengatur keyboard(mengacu ke mov ah,0)

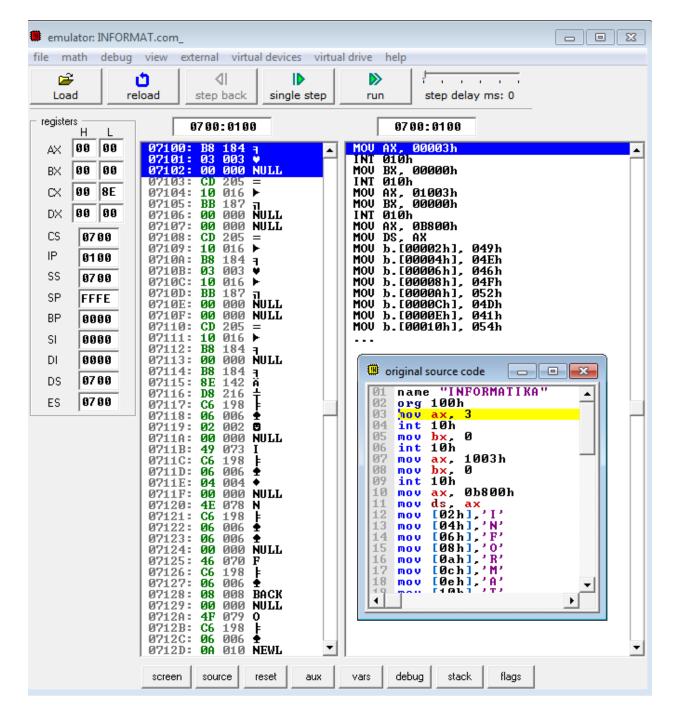


Ret=program akan terminated apabila kita menekan tombol di keyboard(mengacu int 16h)

POSTEST II

```
emu8086 - assembler and microprocessor emulator 4.00-Beta-17
                                                                                                                                       _ O X
file edit bookmarks assembler emulator math ascii codes help
                                                                                                                                  父
                                                                                                                                                 P
                  œ~
    ☆
                                                  H
                            examples
   new
                 open
                                                 save
                                                                   compile
                                                                                emulate
                                                                                                calculator convertor
                                                                                                                               options
                                                                                                                                               help
            name "INFORMATIKA"
org 100h
                                                                                                                                                           •
      02
                     mov ax,
int 10h
mov bx,
int 10h
      04
      05
                                      Ø
      06
                                      1003h
                     mov ax,
mov bx,
int 10h
      07
      08
                                      Ø
      09
      10
                             ax.
                                      0b800h
                     mov
                             ds, ax
[02h],'I'
[04h],'N'
[06h],'F'
                     mov
      12
13
                     mov
                     mov
      14
15
                     mov
                     mov
                              [0ah], 'R'
[0ch], 'M'
[0ch], 'A'
                     mov
                     mov
      18
                     mov
                              [10h],'
      19
20
21
22
23
24
25
                     mov
                     mov
                              [14h],
[16h],
                     mov
                    mov [16h], 'A'
mov [18h], '-'
mov [1ah], 'U'
mov [1ch], 'A'
mov [2ch], 'A'
mov [22h], 'J'
mov [24h], 'A'
mov [26h], 'Y'
mov [28h], 'A'
mov cx, 20
mov di, 03h
mov [di], 1110100b
add di, 2
loop c
                     mov
      26
27
      28
29
      30
      31
32
      33
34
      35
36
37
                     loop c
mov ah,0
int 16h
      38
               Ret
1
line: 39
                  col: 13
                                                                                                   drag a file here to open
```

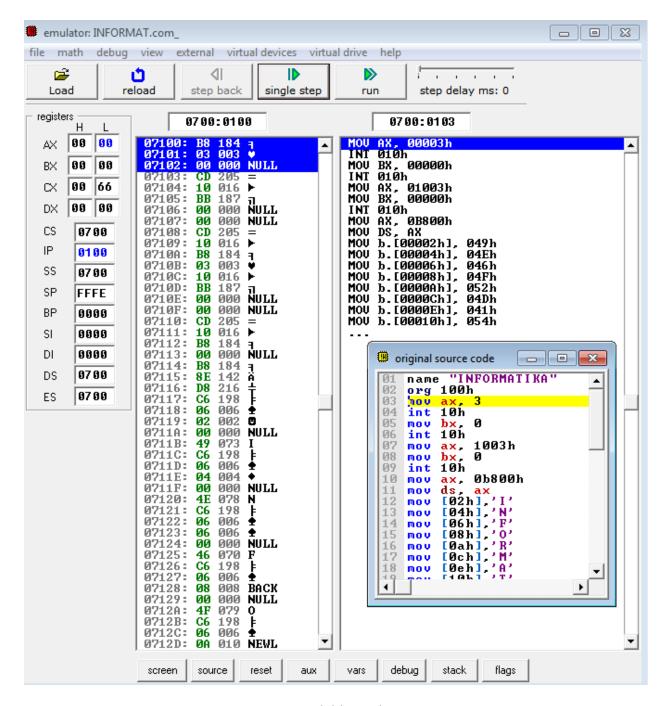
Memodifikasi program



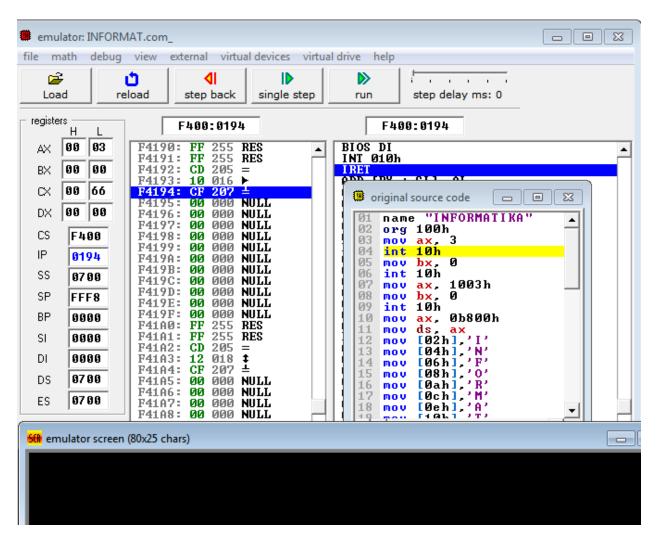
Mengklik emulate



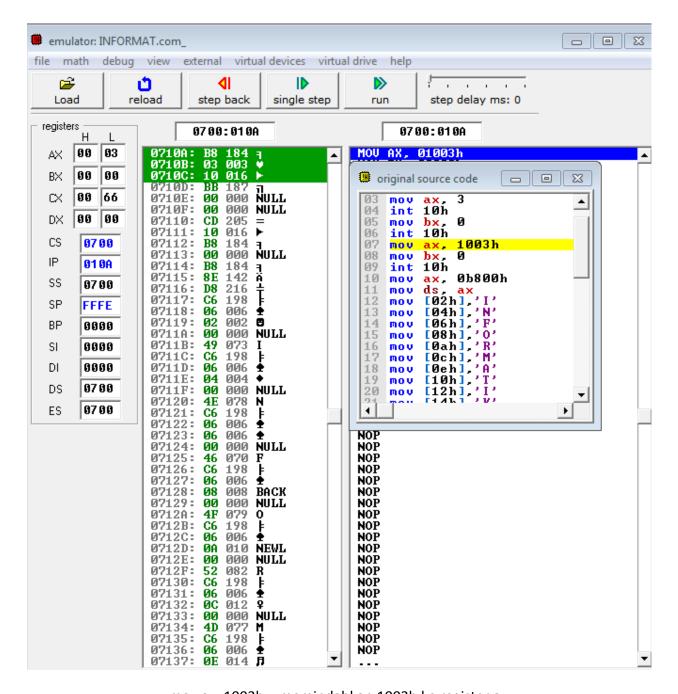
Hasil output program



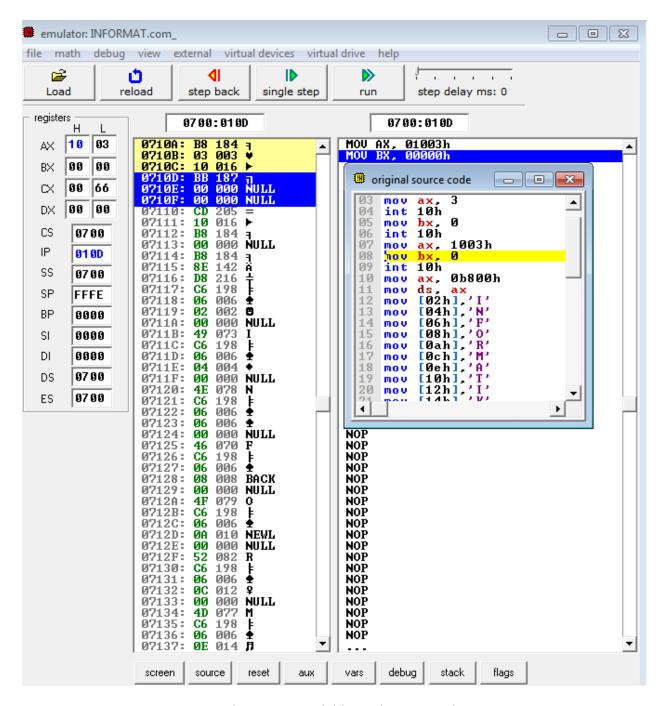
Mov ax,3=memindahkan 3 ke register ax.



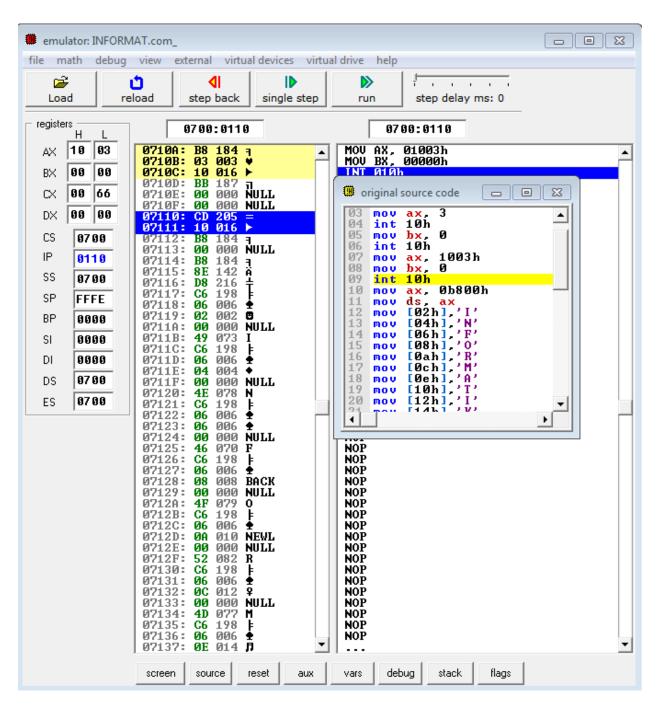
Int 10h=memanggil bios,menyetel mode video ke text mode dengan 80x25 karakter dan 16 warna.(mengacu ke mov ax,3)



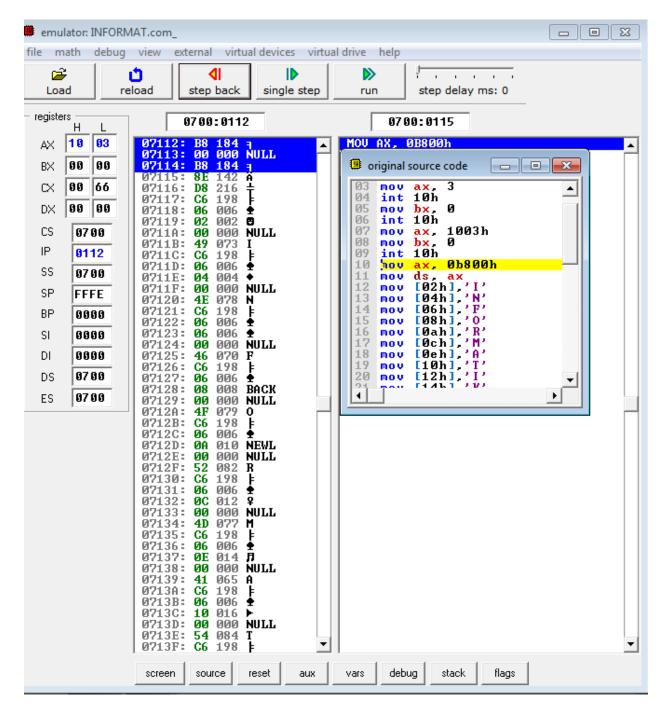
mov ax, 1003h = memindahkan 1003h ke register ax



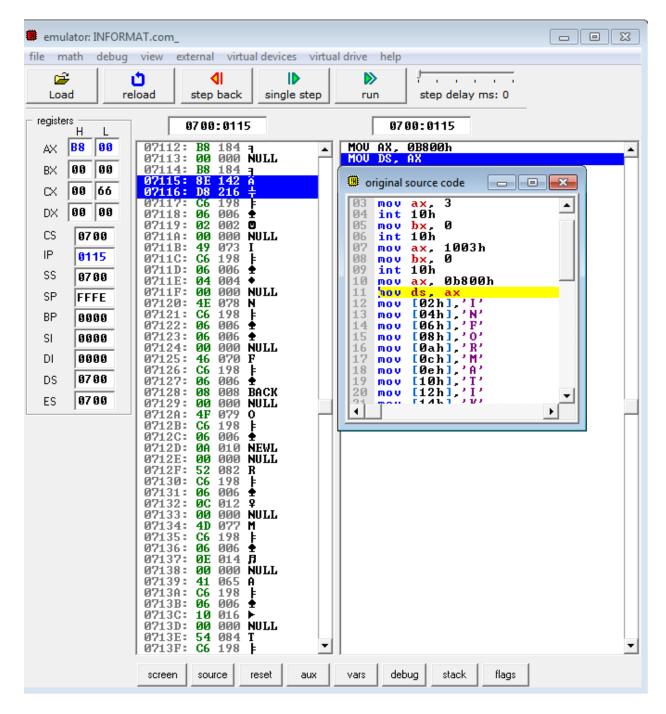
mov bx, 0=memindahkan 0 ke register bx



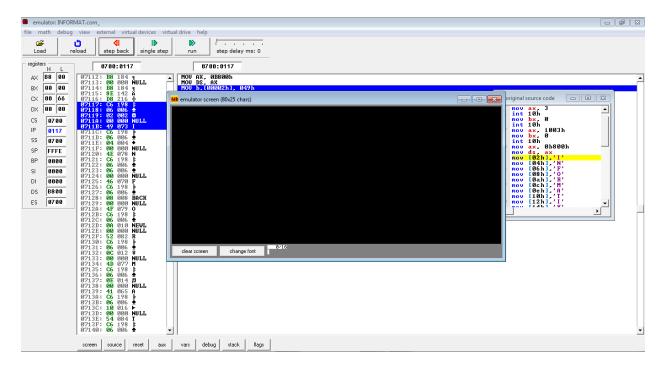
Int 10h=memberikan kedip ke background intensitas diaktifkan/mode berkedip aktif(mengacu ke mov ax,10003h)



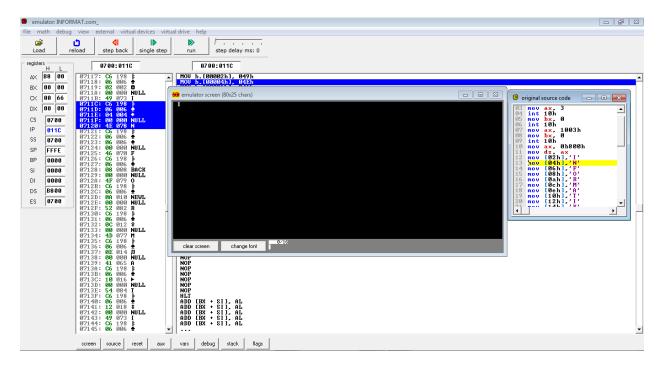
mov ax, 0b800h=memindahkan0b800h ke ax(mode text)



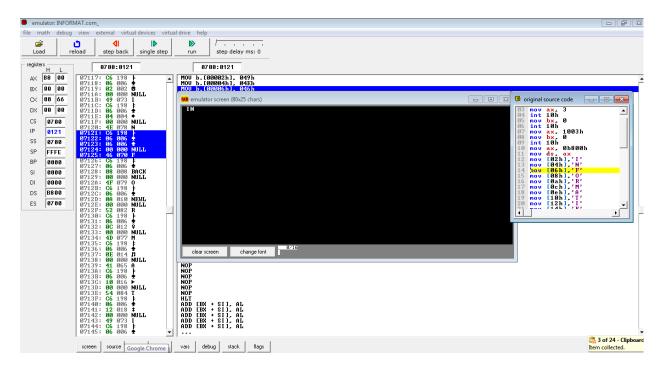
mov ds, ax=memindahkan ax ke ds.



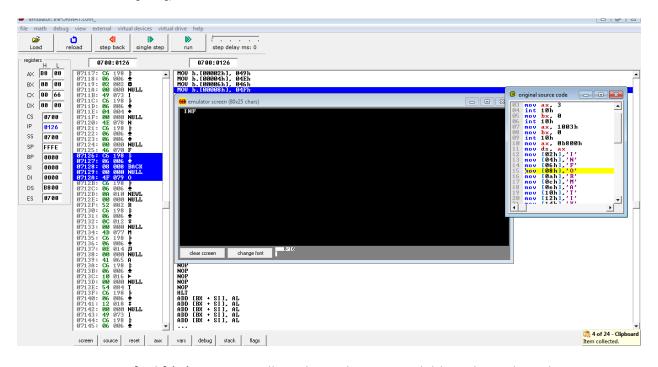
mov [02h],'I'=Memindahkan char I ke 02h



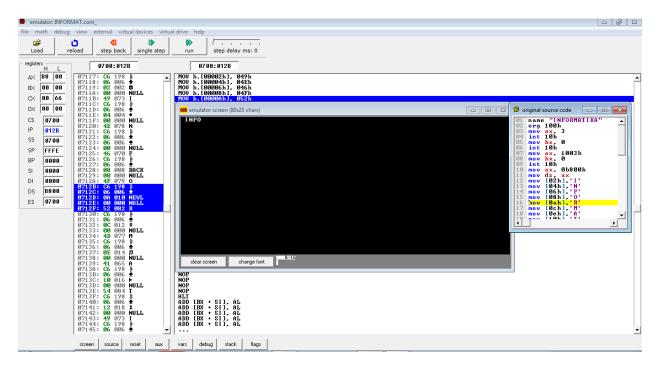
mov [04h], 'N'=Memunculkan char I dan memindahkan char n ke 04h



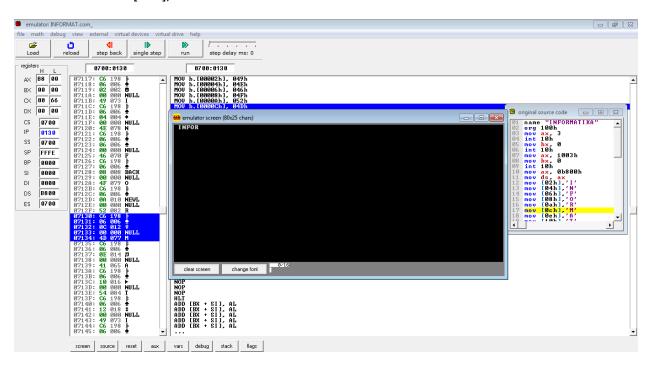
mov [06h], 'F' = Memunculkan char N dan memindahkan char F ke 06h



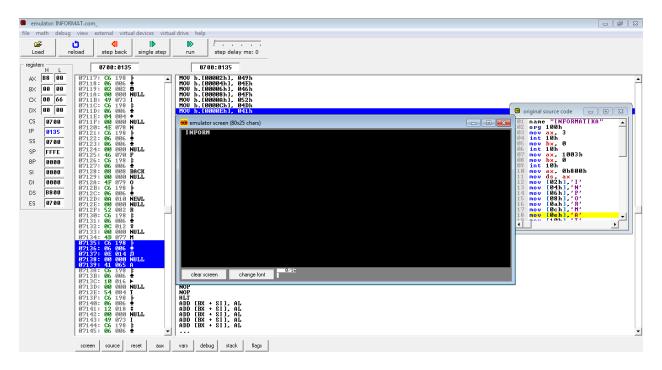
mov [08h],'O' =Memunculkan char F dan memindahkan char O ke 08h



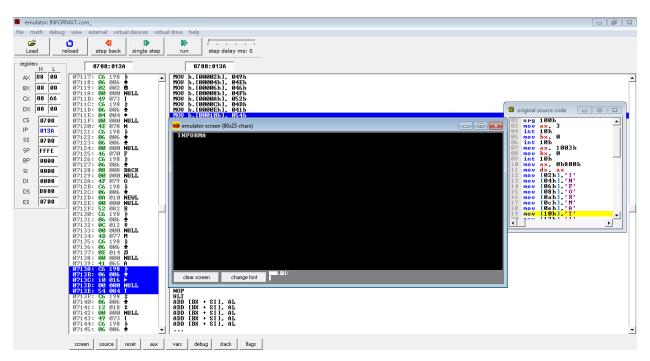
mov [0ah],'R'=Memunculkan char O dan memindahkan char R ke 0ah



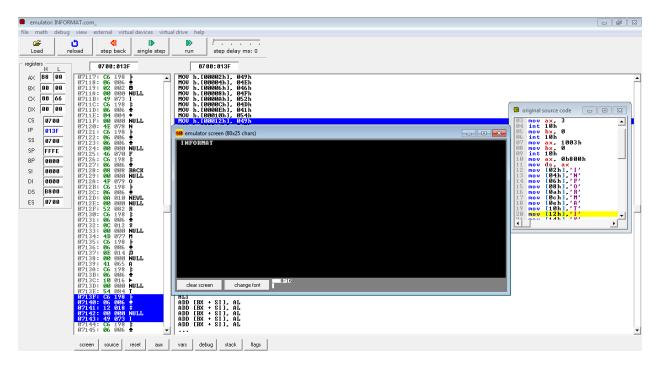
mov [0ch], 'M'=Memunculkan char R dan memindahkan char M ke 0ch



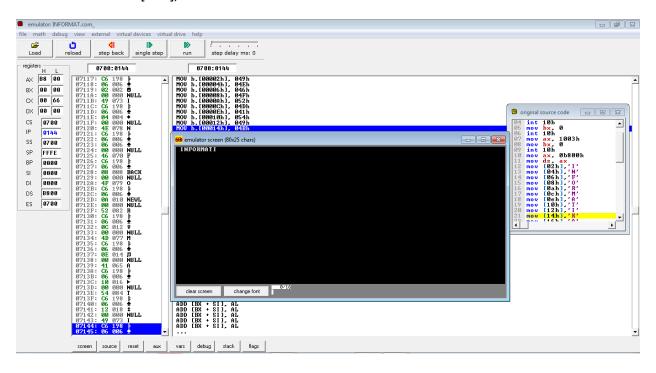
mov [0eh],'A=Memunculkan char M dan memindahkan char A ke 0eh



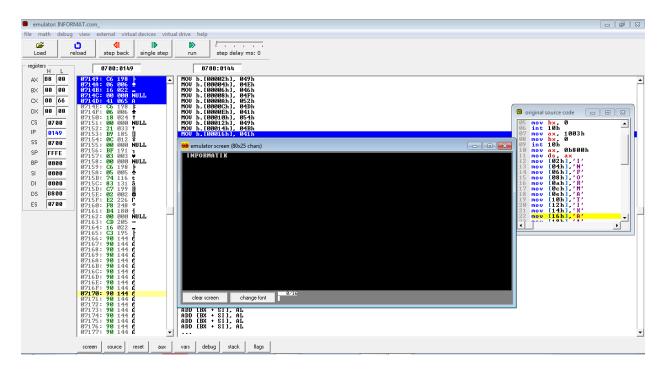
mov [10h],'T'=Memunculkan char A dan memindahkan char T ke 10h



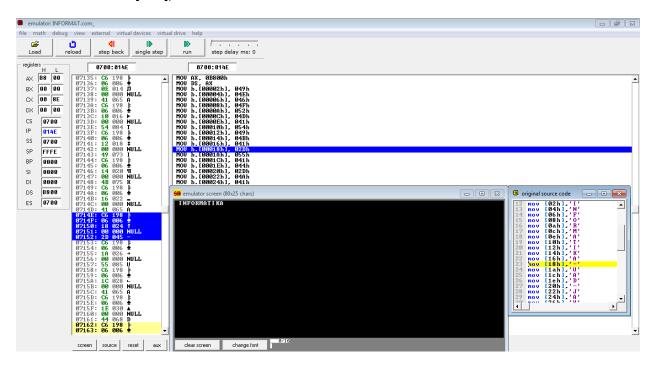
mov [12h],'I'=Memunculkan char T dan memindahkan char I ke 12h



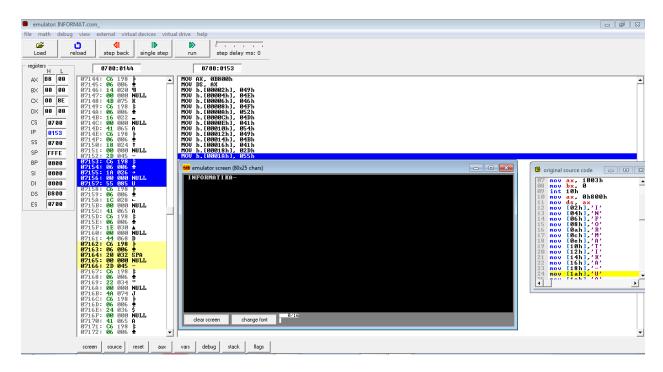
mov [14h],'K'=Memunculkan char I dan memindahkan char K ke 14h



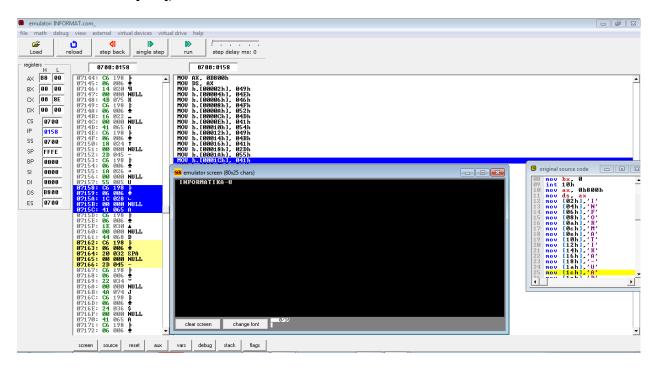
mov [16h],'A'=Memunculkan char K dan memindahkan char A ke 16h



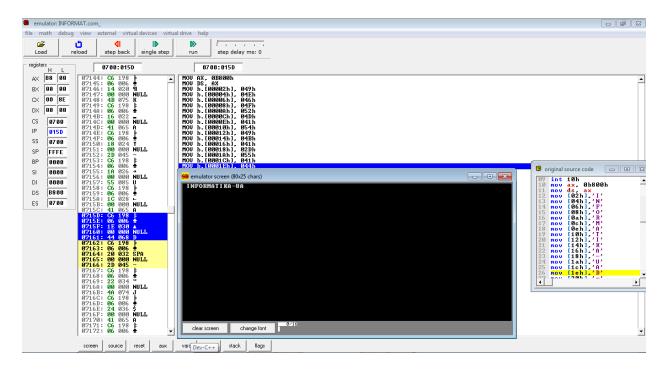
mov [18h],'-'=Memunculkan char A dan memindahkan char - ke 18h



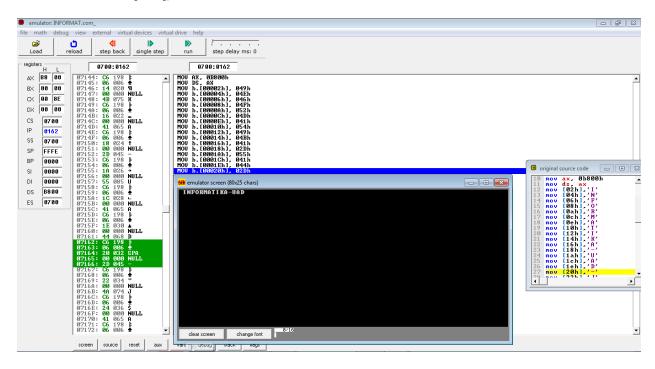
mov [1ah],' U'=Memunculkan char - dan memindahkan char U ke 1ah



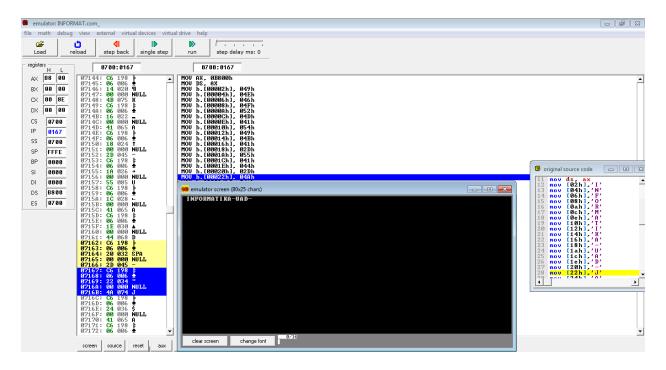
mov [1ch],' A'=Memunculkan char U dan memindahkan char A ke 1ch



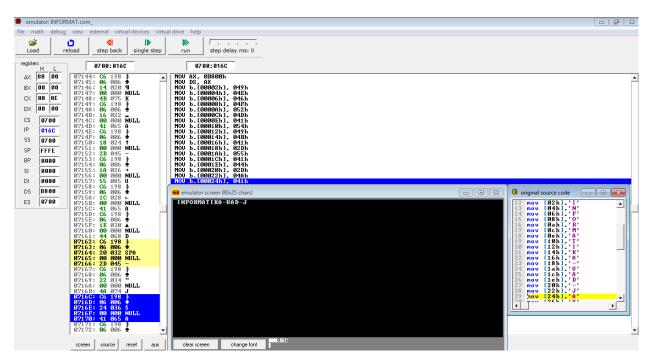
mov [1eh],' D'=Memunculkan char A dan memindahkan char D ke 1eh



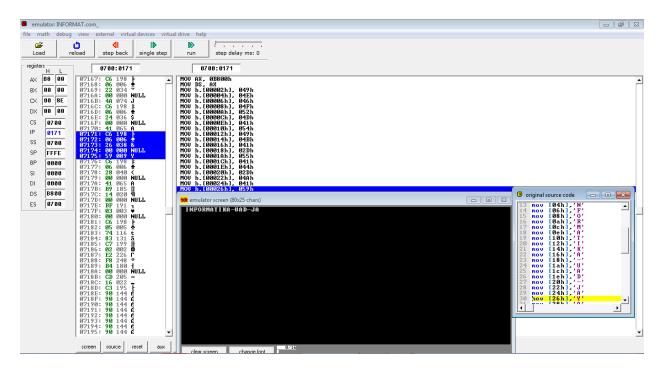
mov [20h],' -'=Memunculkan char D dan memindahkan char - ke 20h



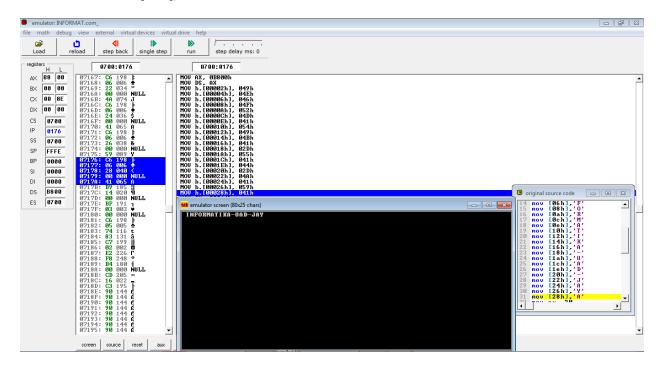
mov [22h],'J'=Memunculkan char – dan memindahkan char J ke 22h



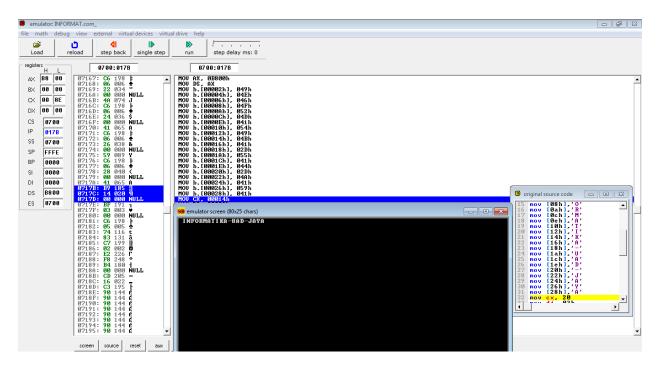
mov [24h],' A'=Memunculkan char J dan memindahkan char A ke 24h



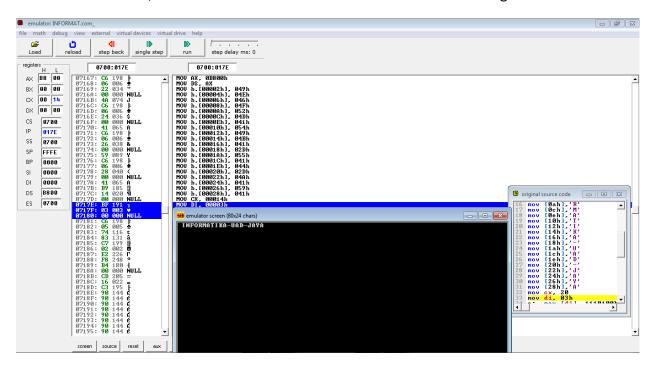
mov [26h],'Y'=Memunculkan char A dan memindahkan char Y ke 26h



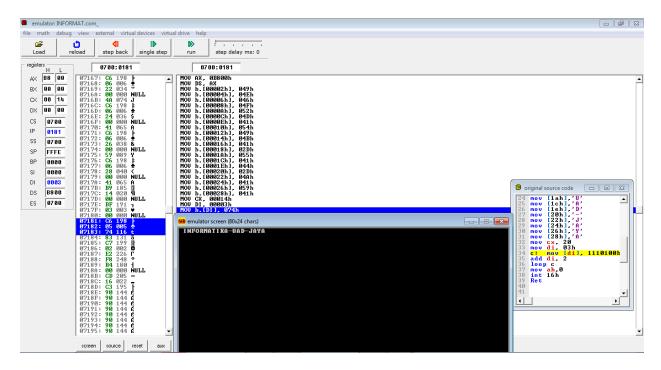
mov [28h],'A'=Memunculkan char Y dan memindahkan char A ke 28h



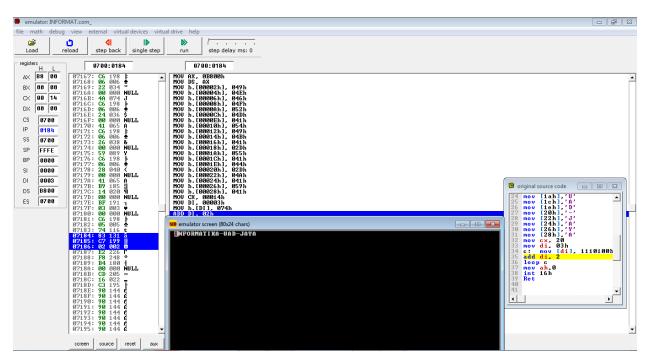
Mov cx,20= Memunculkan char A dan memindahkan 20 ke register cx



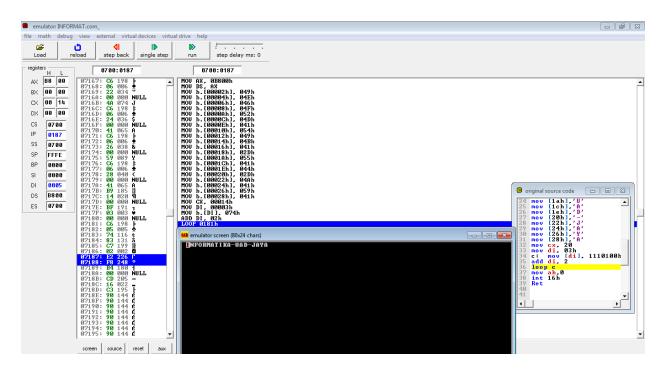
mov di, 03h=memindahkan 03h ke register di



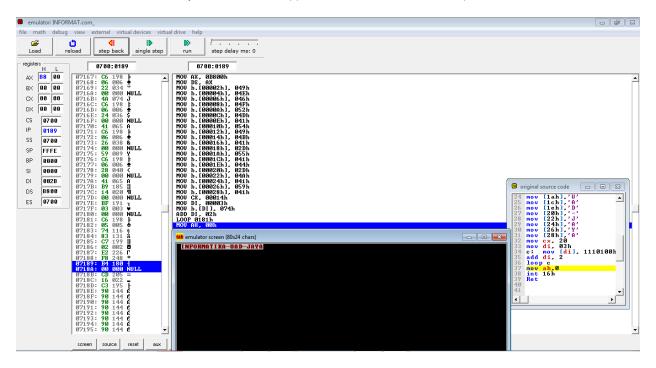
c: mov [di], 1110100b=memindahkan 074h ke register di



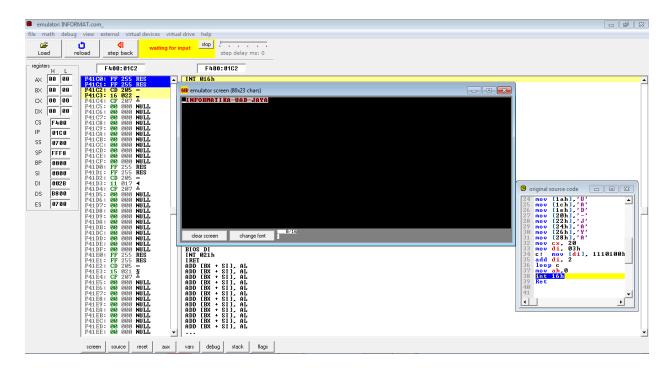
add di,2= Menambahkan 2 ke register di dan memberi warna



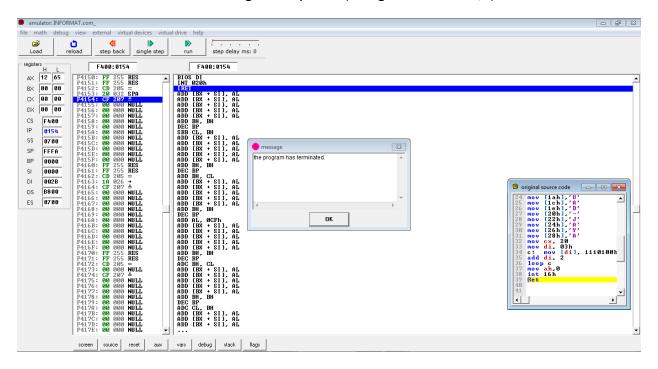
Loop c=mengulang pada dimulai pada c: dan kebawah (hingga loop) sebanyak 20 kali(mengacu pada mov cx,20)(INFORMATIKA-UAD-JAYA)



Mov ah,0=memindahkan nilai 0 ke ah



Int 16h=mengatur keyboard(mengacu ke mov ah,0)



Ret=program akan terminated apabila kita menekan tombol di keyboard(mengacu int 16h)