

100h → hexa decimal  
256 → decimal

# Assembly Language

All time

- ① model small → Code segment data segment
- ② stack 100h → memory segment (256 ASCII value)
- ③ Code (data भूमि) → stack 256 name.
- ④ main PROC → main procedure भूमि

; (मेमोरीमध्ये पडू या निधार अ Comment.)

प्रक्रिया dl register त एध्याते इस प्रकार print करते होते।

- ⑤ mov ah, 1 → simply character input function  
Ah एवं Value एवं दिव्य नियन्त्रित करते होते।
- ⑥ int 21h → function इय |  
ah=2 simply character output function  
ah=9 11 string output function
- ⑦ mov bl, al  
लोगो दिलाया जावा एवं आजार फॉरमाटिंग  
call 43h execute करते होते।
- ⑧ mov ah, 2  
interrupt रुकी int  
आवश्यक नाईप्रिंट एवं ब्यूफ़ाल्ट
- ⑨ mov dl, bl  
al function एवं गोले । आवश्यक नाईप्रिंट  
लिंक मिळें एवं al ए जावा आजार
- ⑩ int 21h  
चले याते एवं याकृष्ण दिलाया जावा
- ⑪ exit:  
mov ah, 4Ch  
int 21h  
main endp  
end main

ax register (accumulator register)

↳ ah, al  $\Rightarrow$  input reserve

bx  $\Rightarrow$  bh, bl # c/b register we'll lower portion work

Cx  $\Rightarrow$  ch, cl

dx  $\Rightarrow$  dh, dl

output go from here

Output newline  $\Rightarrow$  Print करना चाहे,

input का पद नियम से रखा जाए output को प्राप्त करता है।

· mov ah, 2  $\Rightarrow$  character output print next line for.

mov dl, 10  $\Rightarrow$  dl  $\Rightarrow$  character output print onto new line  $\Rightarrow$

'int 21h'  $\Rightarrow$  आवश्यक function call

↳ input

↳ output दूसरे cause carriage return करें. Print करें।

so carriage return must करें। Carriage return का value 13 है।

mov ah, 2

mov dl, 10

int 21h

mov dl, 13

int 21h

→ 1:

S, ah Vom

dl, Vom

13, FA

S, ah Vom

dl, Vom

13, FA

OK, ah Vom

13, FA

→ 2: 13, FA

## Variable declaration

- model small
- stack 100h
- data

a db 5 → a variable & 5 value  
db ⇒ define byte for small value (1 byte)  
dw ⇒ define word for big value (2 bytes)

dynamic initialize input from user

b db ?

• Code

main proc

mov ax, @data

mov ds, ax

mov ah, 1

int 21h

mov bl, al

mov ah, 2

mov dl, a

int 21h

mov ah, 2

mov dl, b

int 21h

exit:

mov ah, 40h

end main int 21h

→ output 5 वाले छंटे  
मिले। ASCII Value Print +  
मिले।

add করা হলে (5+48) এন্ডেন ৫ Print এন্ডে 53(ASCII)=5.

mov ah, 2  
mov al, a  
add dl, 48 .  
int 21h

String print  $\Rightarrow$  string কেস যথাযথ ৫৩

dollar sign use করে ৪০।

lea  $\Rightarrow$  load effective area.

.model small  
.stack 100h  
.data  
a db 'Bangla Baba \$'  
.code  
main PROC  
 mov ax, @data  
 mov ds, ax

data segment টি code segment  
সাইজটি করো।

mov ah, 9  
lea dx, a  
int 21h

exit:

mov ah, 4ch  
int 21h  
main ENDP

end main

the same time 200 mm ~~length~~  
width 100 mm height 200 mm  
 $(2+1) \times 100 \times 200 = 20000$

I can also have 3 inputs and print them.

## Exchange value

exchanging  $b_1$ ,  $b_2$   $\Rightarrow$  exchange in a regard to exchange two values

main proc book <= 69

mov ah,1

int

now  
but

卷之三

1

卷之三

1

100

2

11  
7-40  
now

11

114

moy an 2

19 Dec  
Keweenaw

10

104 3/n

MOV AH,2

101

609

Beep sound print  $\Rightarrow 0x40 \Rightarrow$  ASCII value.

$\hookrightarrow$  dl go start of cursor print out कोरा keep sound ZT5 |

del hide add print del  
go back to last place

Add two numbers

```
mov ah, 1  
int 21h  
mov bl, al  
  
mov ah, 1  
int 21h  
mov bh, al
```

add dl, bh  $\Rightarrow$  that mean  $bl = bl + bh \Rightarrow 20$  Number add 40

dl go error ४0 रखोली | bl print करता

addition or print २० ] ५५ Vom

```
mov ah, 2  
mov dl, bl  
int 21h
```

it will know ASCII value. we  
But if i want to print with the decimal

value than I need to subtract 48

```
mov ah, 2  
mov dl, bl  
sub dl, 48  
int 21h
```

$$\begin{array}{rcl} 179 & = & 19 \\ + 89 & = & 19 \\ \hline 268 & = & 19 \end{array}$$

## Addition of three numbers

Young 1986

Woodbury out

## Subtraction of two numbers

	main	proc
mov	ah, 1	
int	21h	
mov	bx, al	
mov	ah, 1	
int	21h	
mov	bx, al	
sub	bx, bl	
add	bx, bx	
mov	ah, 2	
int	21h	

5 sets  
1st, 2nd, 3rd  
1st, 2nd, 3rd

Lower 4th floor

$\hookrightarrow$  Algebraic B2.

error to honor => add 32.7

Convert Hexadecimal to decimal

$A=10, B=11, C=12, P=15$  এখানে সর্ববৃহত্তম ফলটি । কাহার জন্ম |  
 তাঁর । by default print করবাবে A কে 0 টি জান 65 টি । 185 খিল  
 10 মানে । 10 print হবে সত্য |

.MOV AH,1 < (A-F) INT

int 21h  
mov al, [bx]

। পুরুষের স্বত্ত্বালোক করিয়া আবেগ পূর্ণ হইল

May 2012

mov dl, lo

May 13

21h

more ably, 2 < 1 but defaulf print

mov int 21h → INT ASCII value.

Nov 2011

## Multiply with Static Initialization

mov al, 3 → al एवं मानो 3

mov bl, 2 → bl एवं मानो 2

mul bl ⇒ al = al \* bl

mov ah, 2

mov dl, al

add dl, 48

int 21h

to print decimal value.