

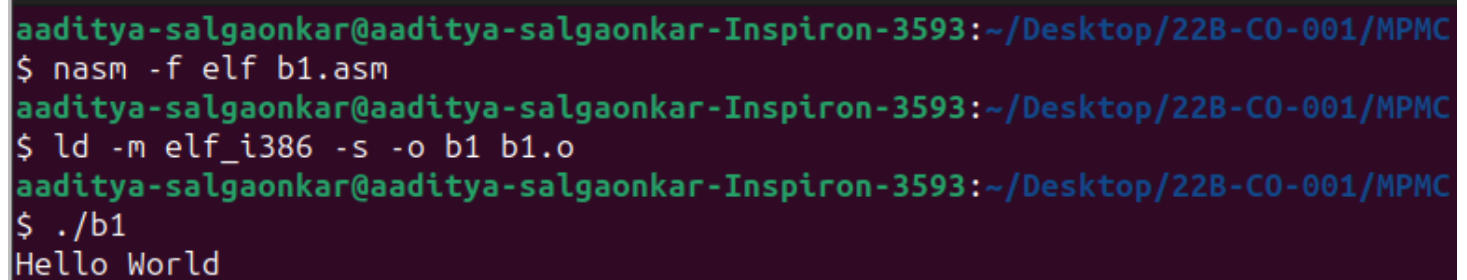
P1 : Write an alp to display hello world.

CODE

```
section .data
hello db 'Hello World', 10
hellolen equ $-hello
```

```
section .text
global _start
_start:
mov eax,4
mov ebx,1
mov ecx,hello
mov edx,hellolen
int 80h
mov eax,1
mov ebx,0
int 80h
```

OUTPUT



```
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-C0-001/MPMC
$ nasm -f elf b1.asm
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-C0-001/MPMC
$ ld -m elf_i386 -s -o b1 b1.o
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-C0-001/MPMC
$ ./b1
Hello World
```

P2 : Write an alp to display hello world followed by a name.

CODE

```
section .data
helloname db 'Hello World', 10
hellonamelen equ $-helloname
name db 'Aaditya',10
namelen equ $-helloname
```

```
section .text
global _start
_start:
mov eax,4
mov ebx,1
mov ecx,helloname
mov edx,hellonamelen
int 80h
    mov eax,4
mov ebx,1
mov ecx,name
mov edx,namelen
```

```
int 80h
mov eax,1
mov ebx,0
int 80h
```

OUTPUT

```
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC
$ nasm -f elf b2.asm
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC
$ ld -m elf_i386 -s -o b2 b2.o
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC
$ ./b2
Hello World
Aaditya
```

P3 : Write an alp to display 9 stars on the screen using times directive.

CODE

```
section .data
s2 times 9 db '*'
newline db 10 , 0
```

```
section .text
global _start
_start:
    mov eax,4
    mov ebx,1
    mov ecx,s2
    mov edx,9
    int 80h
    mov eax,4
    mov ebx,1
    mov ecx,newline
    mov edx,1
    int 80h
mov eax,1
mov ebx,0
int 80h
```

OUTPUT

```
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
nasm -f elf b3.asm
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
ld -m elf_i386 -s -o b3 b3.o
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
./b3
*****
```

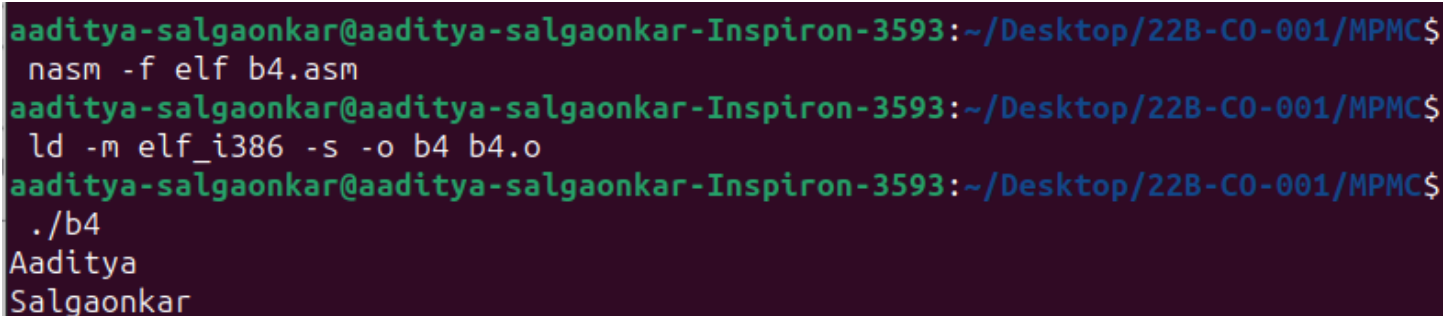
P4 : Write an alp to display two strings using equ directive.

CODE

```
section .data
sys.write equ 4
sys.exit equ 1
sys.out equ 0
name db 'Aaditya', 10
namelen equ $-name
surname db 'Salgaonkar', 10
surnamelen equ $-surname
```

```
section .text
global _start
_start:
mov eax,sys.write
mov ebx,sys.exit
mov ecx,name
mov edx,namelen
int 80h
mov eax,sys.write
mov ebx,sys.exit
mov ecx,surname
mov edx,surnamelen
int 80h
mov eax,sys.exit
mov ebx,sys.out
int 80h
```

OUTPUT



```
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
nasm -f elf b4.asm
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
ld -m elf_i386 -s -o b4 b4.o
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
./b4
Aaditya
Salgaonkar
```

P5 : Write an alp to replace a word in a given string.

CODE

```
section .data
n1 db 'Mr . Aaditya          '
n1len equ $-n1
newline db 10, 0
original db 'Original string  '
originallen equ $-original
replaced db '    Replaced string'
```

```
replacedlen equ $-replaced
section .text
```

```
global _start
_start:
mov eax,4
mov ebx,1
mov ecx,original
mov edx,originallen
int 80h
mov eax,4
mov ebx,1
mov ecx,replaced
mov edx,replacedlen
int 80h
mov eax,4
mov ebx,1
mov ecx,newline
mov edx,1
int 80h
mov eax,4
mov ebx,1
mov ecx,n1
mov edx,n1len
int 80h
mov eax,4
mov ebx,1
mov[n1], dword"Sir"
int 80h
mov eax,4
mov ebx,1
mov ecx,newline
mov edx,1
int 80h
mov eax,1
mov ebx,0
int 80h
```

OUTPUT

```
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
nasm -f elf b5.asm
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
ld -m elf_i386 -s -o b5 b5.o
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
./b5
Original string      Replaced string
Mr . Aaditya        Sir Aaditya
```

P6: Write an alp to read a number from the keyboard and display it

CODE

```
section .data
print db 'Enter a number : '
printlen equ $-print
newline db 10, 0
dis db 'Entered number : '
dislen equ $-dis
```

```
section .bss
num : resb 10
```

```
section .text
global _start
_start:
mov eax,4
mov ebx,1
mov ecx,print
mov edx,printlen
int 80h
mov eax,3
mov ebx,1
mov ecx,num
mov edx,10
int 80h
mov eax,4
mov ebx,1
mov ecx,newline
mov edx,1
int 80h
mov eax,4
mov ebx,1
mov ecx,dis
mov edx,dislen
int 80h
mov eax,4
mov ebx,1
mov ecx,num
mov edx,10
int 80h
mov eax,1
mov ebx,0
int 80h
```

OUTPUT

```

aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-C0-001/MPMC$
nasm -f elf b6.asm
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-C0-001/MPMC$
ld -m elf_i386 -s -o b6 b6.o
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-C0-001/MPMC$
./b6
Enter a number : 291

Entered number : 291

```

P7: Write an alp to print your name by taking it as an input.

CODE

```

section .data
name db 'Enter your name : '
namelen equ $-name
dis db 'Entered name : '
dislen equ $-dis
newline db 10, 0

```

```

section .bss
n : resb 50

```

```

section .text
global _start
_start:
mov eax,4
mov ebx,1
mov ecx,name
mov edx,namelen
int 80h
mov eax,3
mov ebx,2
mov ecx,n
mov edx,50
int 80h
mov eax,4
mov ebx,1
mov ecx,newline
mov edx,1
int 80h
mov eax,4
mov ebx,1
mov ecx,dis
mov edx,dislen
int 80h
mov eax,4
mov ebx,1

```

```
mov ecx,n
mov edx,50
int 80h
mov eax,1
mov ebx,0
int 80h
```

OUTPUT

```
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-C0-001/MPMC$
nasm -f elf b7.asm
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-C0-001/MPMC$
ld -m elf_i386 -s -o b7 b7.o
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-C0-001/MPMC$
./b7
Enter your name : Aaditya Salgaonkar

Entered name : Aaditya Salgaonkar
```

P8 : Write an alp to display two different numbers using equ directive.

CODE

```
section .data
sys.write equ 4
sys.exit equ 1
sys.out equ 0
num1 db '50'
num1len equ $-num1
newline db 10, 0
disp1 db 'First number : '
disp1len equ $-disp1
disp2 db 'Second number : '
disp2len equ $-disp2
num2 db '60'
num2len equ $-num2

section .text
global _start
_start:
mov eax,sys.write
mov ebx,sys.exit
mov ecx,disp1
mov edx,disp1len
int 80h
mov eax,sys.write
mov ebx,sys.exit
mov ecx,num1
mov edx,num1len
```

```
int 80h
mov eax,sys.write
mov ebx,sys.exit
mov ecx,newline
mov edx,sys.exit
int 80h
mov eax,sys.write
mov ebx,sys.exit
mov ecx,disp2
mov edx,disp2len
int 80h
mov eax,sys.write
mov ebx,sys.exit
mov ecx,num2
mov edx,num2len
int 80h
mov eax,sys.write
mov ebx,sys.exit
mov ecx,newline
mov edx,sys.exit
int 80h
mov eax,sys.exit
mov ebx,sys.out
int 80h
```

OUTPUT

```
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
nasm -f elf b8.asm
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
ld -m elf_i386 -s -o b8 b8.o
aaditya-salgaonkar@aaditya-salgaonkar-Inspiron-3593:~/Desktop/22B-CO-001/MPMC$
./b8
First number : 50
Second number : 60
```