

**TITLE:-Program to perform Multiplication using successive addition.**

NAME:-

CLASS:-

BATCH:-

ROLL NO:-

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section .data

welmsg db 10,'Multiplication using successive addition',10

welmsg\_len equ \$-welmsg

nummsg1 db 10,'Enter First two digits of Hex Number::'

nummsg1\_len equ \$-nummsg1

nummsg2 db 10,'Enter Second two digits of Hex Number::'

nummsg2\_len equ \$-nummsg2

resmsg db 10,'Multiplication is ::'

resmsg\_len equ \$-resmsg

blankmsg db 10,' ',10

blank\_len equ \$-blankmsg

section .bss

numascii resb 03

multi1 resb 01

res1 resb 01

resh resb 01

dispbuff resb 04

%macro dispmsg 2

mov eax,04

mov ebx,01

mov ecx,%1

mov edx,%2

int 80h

%endmacro

%macro accept 2

mov eax,03

mov ebx,0

mov ecx,%1

mov edx,%2

int 80h

%endmacro

```

section .text
    global _start
_start:
    dispmsg welmsg,welmsg_len
    dispmsg nummsg1,nummsg1_len
    accept numascii,3
    call packnum
    mov [multi1],bl

    dispmsg nummsg2,nummsg2_len
    accept numascii,3
    call packnum
    mov eax,00
addup:
    add eax,[multi1]
    dec bl
    jnz addup

    mov [res1],eax
    dispmsg resmsg,resmsg_len
    mov ebx,[res1]
    call disp16_proc

    dispmsg blankmsg,blank_len
    mov eax,01 ;Exit
    mov ebx,00
    int 80h

packnum:
    mov bl,0
    mov ecx,02
    mov esi,numascii
up1:
    rol bl,04
    mov al,[esi]
    cmp al,39h
    jbe skip1
    sub al,07h

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skip1: sub al,30h
      add bl,al
      inc esi
      loop up1
      ret
displ6_proc:
      mov ecx,4
      mov edi,dispbuff
dup1:
      rol bx,4
      mov al,bl
      and al,0fh
      cmp al,09
      jbe dskip
      add al,07h
dskip: add al,30h
      mov [edi],al
      inc edi
      loop dup1

      dispmsg dispbuff,4
      ret

```

**\*\*\*\*\* OUTPUT \*\*\*\*\***

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admin@oomplab:~$ nasm -f elf64 -o Pract6a.o Pract6a.nasm
admin@oomplab:~$ ld -o Pract6a Pract6a.o
admin@oomplab:~$ ./Pract6a
  Multiplication using successive addition
  Enter First two digits of Hex Number::05
  Enter Second two digits of Hex Number::05
  Multiplication is ::0019
admin@oomplab:~$

```