

8-Bit Multiplication :

asm Code :

```
Data segment
    msg db 0dh,0ah,"Enter first number: $"
    msg1 db 0dh,0ah,"Enter second number: $"
    result db 0dh,0ah,"The Result is: $"
Data ends

Code segment
    assume CS:Code,DS:Data

start:
    mov ax,Data
    mov DS,ax
    mov dx, offset msg
    mov ah, 09h
    int 21h
    mov ah, 01h
    int 21h
    sub al, 30h
    mov bl, al
    rol bl, 4
    mov ah, 01h
    int 21h
    sub al, 30h
    add al, bl
    mov cl, al
    mov dx, offset msg1
    mov ah, 09h
    int 21h
    mov ah, 01h
    int 21h
    sub al, 30h
    mov bl, al
    rol bl, 4
    mov ah, 01h
    int 21h
    sub al, 30h
    add al, bl
    mul cl ;--Multiplication
    mov cx, ax
    mov bx, ax
    mov dx,offset result
    mov ah,09h
    int 21h

    and bh, 0f0h
    ror bh, 4
    call AsciiConv
    mov dl,bh
    mov ah,02h
    int 21h
    and ch, 0fh
    mov bh, ch
    call AsciiConv
    mov dl,bh
    mov ah,02h
    int 21h
    and bl, 0f0h
    ror bl, 4
    mov bh, bl
    call AsciiConv
    mov dl,bh
    mov ah,02h
    int 21h
    and cl, 0fh
    mov bh, cl
    call AsciiConv
    mov dl,bh
    mov ah,02h
    int 21h
    mov ah,4ch
    int 21h

AsciiConv proc
    cmp bh,0ah
    jc skip
    add bh,07h
skip: add bh,30h
    ret
endp

Code ends
end start
```

Output :

```
D:\>test
```

```
Enter first number: 12
```

```
Enter second number: 04
```

```
The Result is: 0048
```

```
D:\>test
```

```
Enter first number: 90
```

```
Enter second number: 26
```

```
The Result is: 1560
```

```
D:\>
```