**LAB TASK – 3**

1. Write an assembly language program to perform multiplication of 8-bit data.

org 100h

mov al,05h

mov bl,02h

mul bl

mov bl, al

mov ah, al

and ah, 0F0h

shr ah,4

add ah, 30h

cmp ah, 39h

jle print\_first\_digit

add ah, 7

print\_first\_digit:

mov dl,ah

mov ah,02h

int 21h

mov ah, bl

and ah, 0Fh

add ah, 30h

cmp ah, 39h

jle print\_sec\_digit

add ah,7

print\_sec\_digit:

mov dl,ah

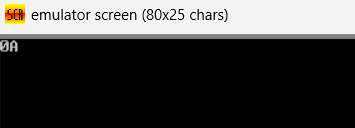
mov ah, 02h

int 21h

mov ah,4Ch

int 21h

OUTPUT:



1. Write a program in assembly language to multiply 16-bit data.

org 100h

mov ax , 5678h

mov bx , 1234h

mul bx

mov bx, ax

mov ah, bh

shr ah, 4

add ah, 30h

cmp ah, 39h

jle print\_high\_nibble

add ah, 7

print\_high\_nibble:

mov dl, ah

mov ah, 02h

int 21h

mov ah, bh

and ah, 0fh

add ah, 30h

cmp ah, 39h

jle print\_low\_nibble

add ah, 7

print\_low\_nibble:

mov dl, ah

mov ah, 02h

int 21h

mov ah, bl

shr ah, 4

add ah, 30h

cmp ah, 39h

jle print\_high\_nibble2

add ah, 7

print\_high\_nibble2:

mov dl, ah

mov ah, 02h

int 21h

mov ah, bl

and ah, 0fh

add ah, 30h

cmp ah, 39h

jle print\_low\_nibble2

add ah, 7

print\_low\_nibble2:

mov dl, ah

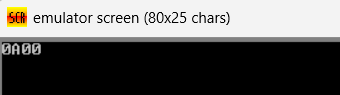
mov ah, 02h

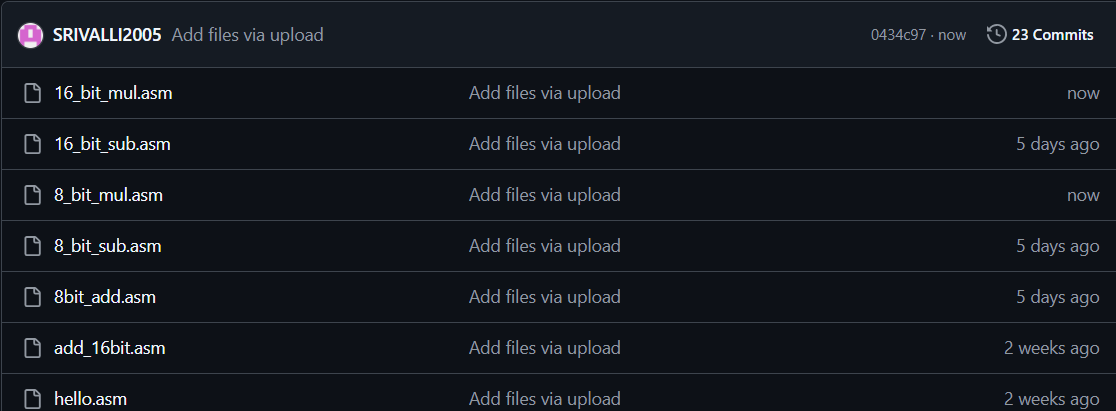
int 21h

mov ah, 4ch

int 21h

OUTPUT :





Github link:

<https://github.com/SRIVALLI2005/-ABM-MODULE->-