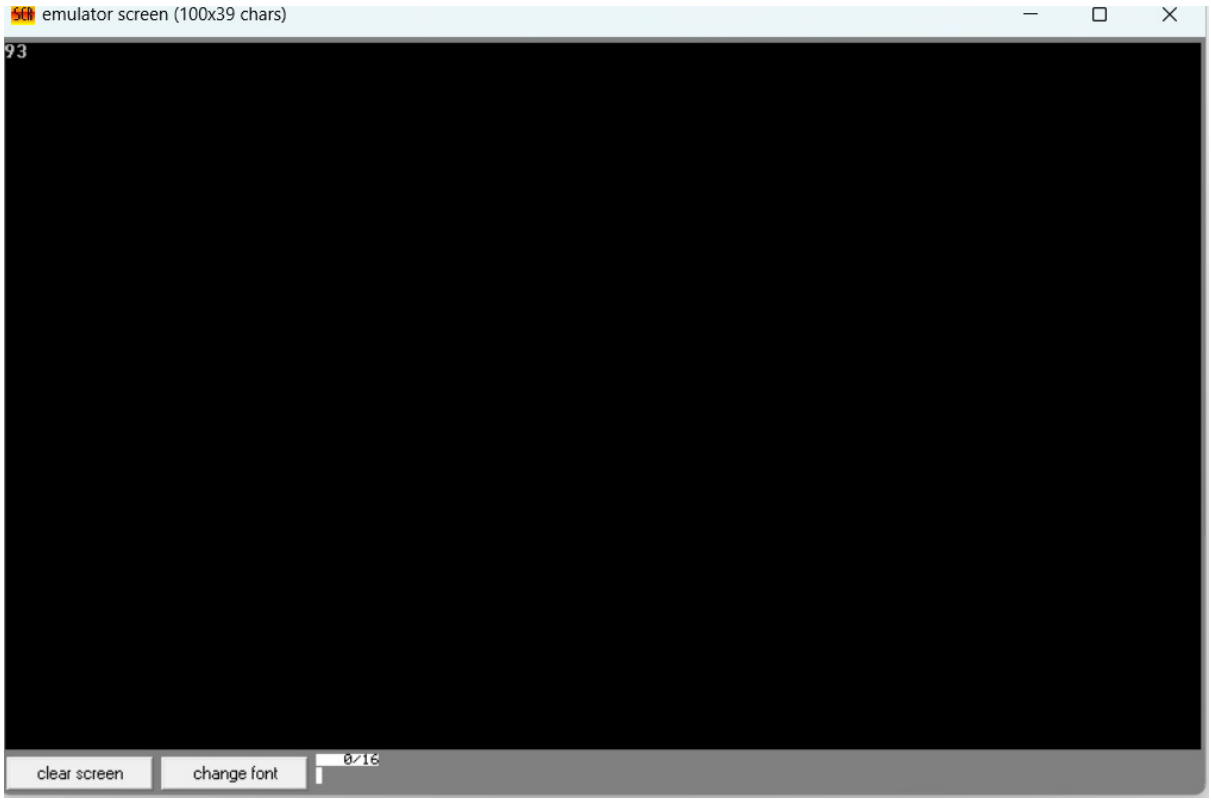
1.**Write an assembly language program to perform multiplication of 8-bit data.**

```
org 100h

mov al, 15h
mov bl, 07h
mul bl

mov bl, al
mov ah, al

and ah, 0F0h
shr ah, 4
add ah, 30h

cmp ah, 39h
jle print_first
add ah, 7

print_first:
mov dl, ah
mov ah, 02h
int 21h

mov ah, bl
and ah, 0Fh
add ah, 30h

cmp ah, 39h
jle print_sec
```

```
add ah, 7

print_sec:
mov dl, ah
mov ah, 02h
int 21h

mov ah, 4Ch
int 21h
```



**2. Write a program in assembly language to perform multiplication of 16-bit data.**

```
org 100h

mov al, 12h
mov bl, 07h
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
```