

**Write a program in assembly language to perform subtraction of 8-bit data.**

**CODE**

```
org 100h

num1 db 45h
num2 db 15h

start:
    mov al, num1
    sub al, num2

    mov ah, al
    and ah, 0F0h
    shr ah, 4
    add ah, 30h
    cmp ah, 39h
    jle display_upper
    add ah, 8

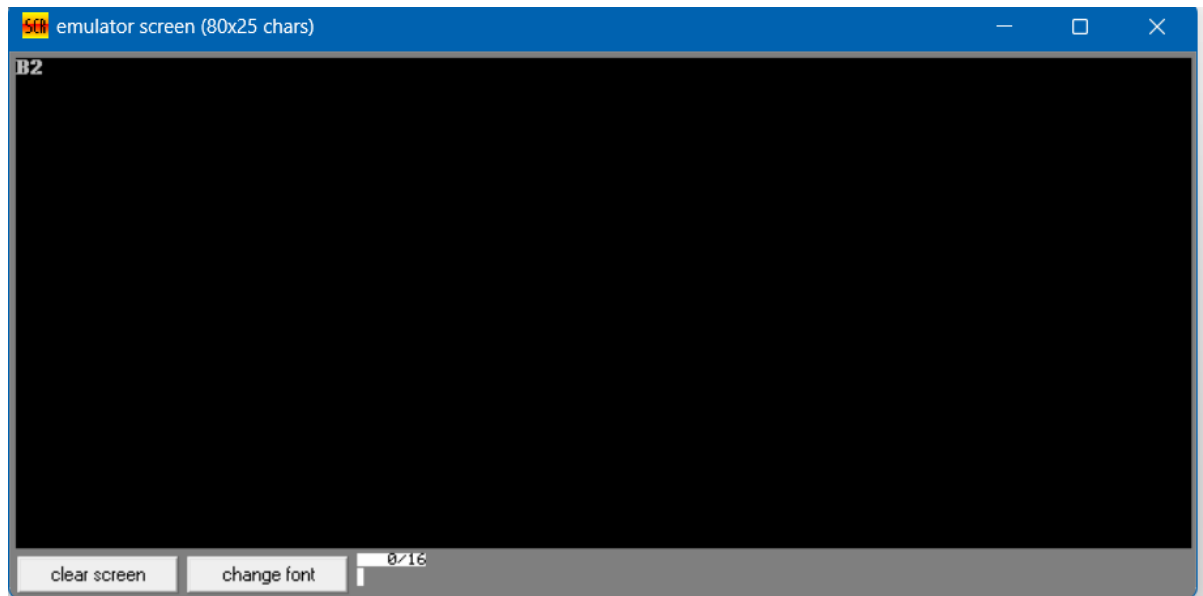
display_upper:
    mov dl, ah
    mov ah, 02h
    int 21h

    mov ah, al
    and ah, 0Fh
    add ah, 30h
    cmp ah, 39h
    jle display_lower
    add ah, 8

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

    mov ah, 4Ch
    int 21h
```

**OUTPUT**



**2. Write an assembly language program to perform subtraction of 16-bit data.**

**CODE**

```
org 100h

num1 dw 1234h
num2 dw 5678h

start:
    mov ax, num1
    sub ax, num2

    mov bx, 10
    mov cx, 0

convert_to_decimal:
    xor dx, dx
    div bx
    push dx
    inc cx
    test ax, ax
    jnz convert_to_decimal

print_digits:
    pop dx
    add dl, 30h
    mov ah, 02h
    int 21h
    loop print_digits
```

```
mov ah, 4Ch  
int 21h
```

```
end start
```

## OUTPUT

