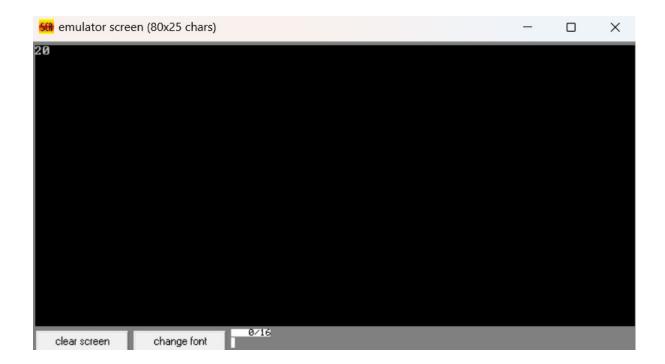
Problem Statement:-1

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

```
org 100h
num1 db 50h
num2 db 20h
start:
  mov al, [num1]
  add al, [num2]
  mov bl, al
  call print_hex
  mov ah, 4Ch
  int 21h
print_hex:
  mov ah, al
  and al, 0F0h
  shr al, 4
  add al, '0'
  cmp al, '9'
  jbe print_hex_low
  add al, 7
print_hex_low:
  mov dl, al
  mov ah, 02h
  int 21h
  mov al, bl
  and al, 0Fh
  add al, '0'
  cmp al, '9'
  jbe print_hex_done
  add al, 7
print_hex_done:
  mov dl, al
  mov ah, 02h
  int 21h
```

ret



Problem Statement:-2

2). Write a program in assembly language to perform addition of 16bit data.

```
org 100h
num1 dw 1892h
num2 dw 4562h
start:
  mov ax, [num1]
  add ax, [num2]
  mov bx, ax
  mov ah, 0
  mov al, ah
  call print_hex
  mov al, bl
  call print hex
  mov ah, 4Ch
  int 21h
print_hex:
  mov ah, al
  and al, 0F0h
  shr al, 4
  add al, '0'
  cmp al, '9'
  jbe print_hex_low
  add al, 7
```

```
print_hex_low:
  mov dl, al
  mov ah, 02h
  int 21h
  mov al, ah
  and al, 0Fh
  add al, '0'
  cmp al, '9'
  jbe print_hex_done
  add al, 7
print_hex_done:
  mov dl, al
  mov ah, 02h
  int 21h
 60x25 chars)
                                                                              X
02F2
                  change font
   clear screen
```