**SCHOOL SUBJECT**

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**Prelim Exam Assembly Language (Part 2b)**

**Instructions:**

Make a program that will perform the following in the following sequence:

first: run the LED light to count from 1 to 8,

second: run the vertical traffic lights for 8 seconds,

third: run the horizontal traffic lights for 8 seconds,

fourth: turn on all red lights, and

Source Code

;SALANATIN || BSCS 2AB

org 100h

#start=led\_display.exe#

#start=Traffic\_Lights.exe#

org 100h

mov ah,9 ; 1.

lea dx, display\_name

int 21h

mov ax, 0

mov cx, 9

jmphere1:

out 199, ax

inc ax

loop jmphere1

mov ax, vertical ; 2.

out 4, ax

mov cx, 7Ah

mov dx, 1200h

mov ah, 86h

int 15h

mov ax, horizontal ; 3.

out 4, ax

mov cx, 7Ah

mov dx, 1200h

mov ah, 86h

int 15h

mov ax, red ; 4.

out 4, ax

mov cx, 7Ah

mov dx, 1200h

mov ah, 86h

int 15h

mov ax, 7 ; 5.

mov cx, 8

jmphere2:

out 199, ax

dec ax

loop jmphere2

mov ah,4ch

int 21h

ret

display\_name db "Nathaly Pearl F."

; 7A1200h = 8 s

; ba98 7654 3210

horizontal dw 0000\_1000\_0010\_0000b

vertical dw 0000\_0011\_0000\_1100b

red dw 0000\_0010\_0100\_1001b

ret

Graphical user interface, application

Description automatically generated