## **Display Memory - Homework**

We did following code in class:

```
; clear the screen
[org 0x0100]
                    mov ax, 0xb800
                                                                     ; load video base
in ax
                    mov es, ax
                                                                     ; point es to
video base
                    mov di, 0
                                                                     ; point di to top
left column
                                                                           ; es:di
pointint to --> 0xB800:0000 (B8000)
nextchar:
             mov word [es:di], 0x0720 ; clear next char on screen
                    add di, 2
                                                                     ; move to next
screen location
                    cmp di, 4000
                                                              ; has the whole screen
cleared
                    jne nextchar
                                                              ; if no clear next
position
                    mov ax, 0x4c00; terminate program
                    int 0x21
```

**Question 1:** Update above code such that it prints all characters (ASCII 0 to 255) on screen starting from location zero onwards and fills all the screen as shown in the figure below:

[Hint: Keep attribute byte in AH and characters' ASCII in AL]

```
DOSBox 0.74-2, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX
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0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUWXYZ[\]^
iiiéâäàågêeèïîìiAåÉæHôoòûùijÖÜÇ£¥RfáíóúñѺ°¿┌¬¼¼↓«»
```

**Question 2:** Update the code written in Question 1 to print blinking characters with high intensity as shown in the figure below:

