|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 14 | 23 |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | **DisplayMemory** | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |
|  |
| Data Segment (section of memory contains most data used by a program**): e.g. int a=5**; **global variables** |
| Code Segment (Hold the code etc. program instruction and procedure): **e.g. cout<<a+b** |

**80 columns, 25 rows**

**80\*25= 2000 cells**

**Each 1 cell having 2 bytes space**

**2000\*2= 4000 (total) bytes**

ES (0xB800)

Data segment

Code segment

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Second (MS Byte**)   |  |  |  |  | | --- | --- | --- | --- | |  | **RGB** |  | **RGB** | | blink | Background color | Intensity (Bold) | Foreground color | | **2th Nibble** | **2rd Nibble** | **1nd Nibble** | **1st Nibble** | | **First (LS Byte)**  ASCII VALUE |

Style Byte(color and styling of character)

Character Byte (going to display)

**One Memory Cell Structure (2 byte)**

<https://www.tweaking4all.com/software-development/ascii-html-table-characters/>