**National University of Computer and Emerging Sciences, Lahore Campus**

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|  | **Course:** | **COAL** | **Course Code:** | **EE-2003** |
|  | **Program:** | **BS (Computer Science)** | **Semester:** | **SPRING 2024** |
|  | **Deadline:** | **3rd May'2024** | **Total Marks:** | **100** |
|  | **Section:** | **BCS-4B**  **ASSIGNMENT-7** | **Roll number:** |  |

**Instruction/Notes:**

* **Plagiarism in any form will result into a penalty.**
* **Submit only asm files and follow the naming convention (rollNumber\_questionNo) eg. 22L-1234\_q1**
* **Ensure that your programs handle every test case.**

**Question:1 (100)**

Your task is to display different colors after every ten seconds, such as the program starts with red color, after ten seconds the screen turns white and keeps on changing colors after every ten seconds until 100 seconds (it means 10 colors will be displayed). The space bar key (any other key can be used) will pause the timer and make the color stay until the key is released.

You are required to fulfill following requirements

* Use timer interrupt.
* Use TSR (Terminate and Stay Resident).
* Use Keyboard interrupt (int 0x16) for pausing the screen.