National University of Computer and Emerging Sciences, Lahore Campus

Course Name:	COAL - LAB	**Course Code:** EL2003
Program:	BS(Computer Science)	**Semester:** Fall 2023
Duration:	45 minutes	**Total Marks:** 30
Paper Date:	1-Dec-23	**Weight:** 5%
Section:	BCS-3H	**Pages:** 1
Exam:	Quiz-2	

Student : Name:_____ Roll No._____ Section:_____

Instruction/Notes:

1. Understanding the question paper is also part of the exam, so do not ask for any clarification.
2. Talking/Discussion is not allowed. It is your responsibility to protect your code and save it from being copied. If you don't protect it all matching codes are considered copy/cheating cases.
3. Failure to observe above mentioned instructions will lead to a negative mark on the Exam.

Question 1: Develop an assembly program for a game using interrupt 16h (keyboard interrupt) and interrupt 8h (timer interrupt). Randomly place 10-15 characters on the screen. The user has 10 seconds to press each character displayed on the screen. When a character is pressed, remove it from the screen. If the user successfully presses all the characters within the given time, display "You won." Otherwise, if the user fails to press all characters in 10 seconds, display "You lost." Allow the user to press a key to start a new round. The program should run as a TSR and be terminated by pressing a specific key.