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| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| final design | **Course:** | **COAL Lab** | **Code:** | **EL213** |
| **Program:** | **BS (Computer Science)** | **Semester:** |  |
| **Duration:** | **20 minutes** | **T. Marks:** | **10** |
| **Date:** | **22-11-22** | **Weight** | **5** |
| **Section:** |  | **Page(s):** | **1** |
| **Exam:** | **Quiz 2** |  |  |

Instructions/Notes:

* Use of the internet, notes, codes, lab manuals, and flash drives is strictly prohibited.
* You are only allowed to use the hard copy of book.
* Submit questions on Google Classroom as well.
* Your code should be **intended** and commented properly. Use meaningful label names.
* It is your responsibility to save your code from being copied. All matching codes will be considered cheating cases. PLAGIARISM will result in forwarding of case to Disciplinary Committee and negative marks in Lab Final.

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**Question 1: Marks 10**

Write a TSR to make an arrow travel the border of the screen from top left to top right to bottom right to bottom left and back to top left at the speed of 36.4 locations per second. The arrow should not destroy the data beneath it and should be restored as soon as the arrow moves forward. The arrow head should point in the direction of movement using the characters > V < and ^.