|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| C:\Users\saif\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\final design.jpg | **Course:** | **Design and Analysis of Algorithms** | **Course Code:** | **CS302** |
| **Program:** | **BS(Computer Science)** | **Semester:** | **Spring 2018** |
| **Duration:** | **10 Minutes** | **Total Marks:** | **10** |
| **Paper Date:** | **6-Feb-18** | **Weight** | **4** |
| **Section:** | **D** | **Page(s):** | **1** |
| **Exam:** | **Quiz 1** | **Roll No:** |  |
| **Section:** |  |
|  | | | | |

Write down the recurrence relation for the following algorithm and analyze its time complexity using iteration method. Show complete steps

|  |
| --- |
| **sort(A, n){**  **if(n>1{**  **for i =1 to n**  **if (A[i] > A[i +1]) then**  **swap (A[i], A[i+1])**  **sort(A, n-1)**  **}**  **}** |