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| **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:** | **20-Feb-18** | **Weight** | **3** |
| **Section:** | **E** | **Page(s):** | **1** |
| **Exam:** | **Quiz 2(b)** | **Roll No:** |  |
| **Section:** |  |
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Below is the code for Bubble sort. Draw the decision tree of Bubble sort when sorting 3 elements

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| **BubbleSort(A,n)**  **{**  **for(i=1 to n-1){**    **for(j= 1 to n-i){**  **if(A[j+1]<A[j])**  **swap(A[j],A[j+1])**  **}**    **}** |

Let V1, V2 and V3 be the initial unsorted elements, the decision tree would be

