Student Name: Student ID: Total Marks: /30

**On completion of the assignment, you should be able to demonstrate the following learning outcomes:**

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| CLO2 | Construct appropriate data structures to solve a given problem (C3, PLO2) | Assignment - Solution |
| CLO3 | Demonstrate a solid understanding of how to write solutions using various data structures and algorithms. (P5, PLO3) | Assignment - Lab Evaluation Work |

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| **Question No.** | **Topic** | **Question Vs Taxonomy** | | | | | |  |
| **Affective Level** | | | | | |  |
| **1** | **2** | **3** | **4** | **5** |  | **PLO** |
| **SQ** | **SQ** | **SQ** | **SQ** | **SQ** |  |  |
| **Q1** | **Individual Assignment - Lab Evaluation Work #2** |  |  |  |  | **30%** |  | **3** |
|  | **Total** |  |  |  |  | **30%** |  |  |

**CLO 3 – LAB EVALUATION WORK #2 (30 Marks)**

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| **CLO / PLO** | **ASSESSMENT CRITERIA** | | **FAIL** | **FAIL** | **MARGINAL FAIL** | **PASS** | **CREDIT** | **DISTINCTION** |
| **CLO 3**  **-**  **PLO 3** | Lab Work #2 –  System & Presentation  **(Individual)** | **Practical Skill**  Problem-Solving Skills  **(15 marks)** | **0** | **1 – 5** | **6 - 7** | **8 - 9** | **10 -11** | **12 - 15** |
| Did not attend the presentation  OR  Attend but did not present. | Minimal or no ability to identify or solve technical issues.  Ineffective or incorrect use of data structures and algorithms.  Features are poorly implemented or fail to meet specifications.  The code is unclear, inefficient, and contains numerous errors.  Minimal or no significant contribution to the team’s goals.  Little to no evidence of innovation or creative problem-solving. | Basic identification of technical challenges with limited resolution.  Some use of appropriate data structures and algorithms, but with notable errors or inefficiencies.  Features meet some but not all design specifications.  Code is somewhat readable and efficient but contains errors or is poorly organized.  Contribution is present but lacks depth or impact on team goals.  Some evidence of creativity, but not consistently applied or well-developed. | Adequate ability to identify and address technical issues.  Appropriate use of data structures and algorithms, with minor errors or inefficiencies.  Features are generally implemented according to specifications with some minor deviations.  Code is mostly readable, efficient, and correct with few errors.  Solid contribution to team goals, demonstrating effective collaboration.  Clear evidence of creativity and innovation in some aspects of feature development. | Effective identification and resolution of technical challenges.  Skillful and appropriate use of data structures and algorithms.  Features are well implemented with minor improvements possible.  The code is clear, efficient, and correct, with minimal errors.  Significant contribution to team goals with strong impact.  Strong evidence of creativity and innovation, with effective application to problem-solving. | Excellent ability to identify and address complex technical challenges.  Highly effective and optimized use of data structures and algorithms.  Features are expertly implemented according to all design specifications.  Code is of high quality, exceptionally readable, efficient, and error-free.  Outstanding individual contribution with a significant positive impact on team goals.  Exceptional creativity and innovation, demonstrating original and effective problem-solving approaches. |
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| **Practical Skill**  Q&A with Justification of Data Structures **(15 marks)** | **0** | **1 – 5** | **6 - 7** | **8 - 9** | **10 -11** | **12 - 15** |
| Did not attend the presentation  OR  Attend but did not present. | Explanation is unclear or illogical, with significant gaps in understanding.  Chosen data structures are irrelevant or misaligned with functionality.  Justification does not align with system requirements or performance needs.  The presentation is ineffective, poorly organized, and fails to clearly explain individual contributions. | Basic explanation provided with some logical gaps or unclear points.  Data structures are somewhat relevant but with notable misalignment to functionality.  Justification partially aligns with system requirements but lacks depth.  The presentation is somewhat organized but lacks clarity or fails to fully explain individual contributions. | Adequate explanation with a clear rationale for the choice of data structures.  Chosen data structures are generally relevant and appropriately applied to functionality.  Justification aligns with most system requirements and performance needs.  The presentation is clear and most effective, explaining individual contributions adequately. | Clear, logical, and well-reasoned explanation for the choice of data structures.  Data structures are highly relevant and well-suited to the implemented functionality.  Justification is well-aligned with system requirements and performance needs, showing good understanding.  The presentation is well-organized, clear, and effectively explains individual contributions. | Exceptional explanation that is both clear and logically compelling, demonstrating thorough understanding.  Data structures are perfectly relevant and excellently applied to the functionality.  Justification is thoroughly aligned with all system requirements and performance needs, showcasing deep insight.  The presentation is highly effective, exceptionally well-organized, and clearly and comprehensively explains individual contributions. |
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