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| **PLEASE ANSWER ALL QUESTIONS.** | **Total 20 Marks** |

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| **QUESTION 1**  Write a C program that uses a linked list to store integers and prints the linked list in reverse order.  **Input Description:**  The input set contains two lines of input.  The first line of input is an integer . The next line contains space separated integers denoting the elements of the list.  **Output Description:**  Output should be one line containing the integers in reverse order separated by a space.  **Sample Input:**  5  10 40 8 50 45  **Expected Output:**  45 50 8 40 10 | 8 marks |
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| **QUESTION 2**  Write a program in C to copy the elements of one array into another array in reverse order using pointer.  **Input Description:**  The input set contains two lines of input.  The first line of input is an integer . The next line contains space separated integers denoting the elements of the list.  **Sample Input:**  5  10 40 8 50 45  **Expected Output:**  The elements stored in the first array are:  10 40 8 50 45  The elements copied into the second array are:  45 50 8 40 10 | 4 marks |
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| **QUESTION 3**  Write a C program that takes an grid as input and then calculates the sum of each row. Afterwards, it displays the maximum of the sums.  **Input Description:**  The first line of input is contains two integers . The next lines contain space separated integers denoting the elements of the row.  **Sample Input:**  3 2  10 40  8 50  45 20  **Expected Output:**  The sum of Row 1: 50  The sum of Row 2: 58  The sum of Row 3: 65  Row 3 has the largest sum with 65. | 4 marks |
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| **QUESTION 4**  Write a C program that finds the first repeating integer in a list and returns the index of it. If no such elements exist then it will return (without quotes).  **Input Description:**  The input set contains two lines of input.  The first line of input is an integer . The next line contains space separated integers denoting the elements of the list.  **Output Description:**  Output should be one line denoting the index of the first repeated integer in the list. If no such element is present in the list, (without quotes) should be displayed.  **Sample Input:**  6  10 40 8 50 40 20  **Expected Output:**  4 | 4 marks |
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| **\*\*END OF QUESTIONS\*\*** | |