**Ahsanullah University of Science and Technology**

*Department of Computer Science and Engineering*

CSE3200 (Software Development – V)

Fall – 2020

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|  | **Assignment – 01** | **Marks: 7+8 = 15** |

**Take user input for all the problems.**

**Sample for User Input:** string userName = Console.ReadLine();

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| 1. **Write a program to find the trace of any square matrix.** | |
| Input: 01   |  |  |  | | --- | --- | --- | | 2 | -3 | 1 | | 2 | 0 | -1 | | 1 | 4 | 5 | | Output: 01  Trace of the Matrix = 7 |
| Input: 02   |  |  |  | | --- | --- | --- | | 100 | 5 | -4 | | 2 | 0 | 4 | | Output: 02  Invalid Input (should be a square matrix) |
| 1. **Write a program to perform the following operations. (Print after each operation)**    1. Take a string variable and input the given statement in that variable:   “Laptop Mouse Book Mobile Television Pencil”   * 1. Separate the words, and put each word as an element in a list.   2. Sort the list in descending order.   3. Create a second list and put the following words in that list.   “Tablet Charger Keyboard”   * 1. Insert the first list on the top of the second list.   2. Keep only the electronic devices in the list and discard all others. | |