**1.6 You have an algorithm that process a list of numbers. It firsts sorts the list using an efficient sorting algorithm and then finds the maximum element in sorted list. Write the code for the same.**

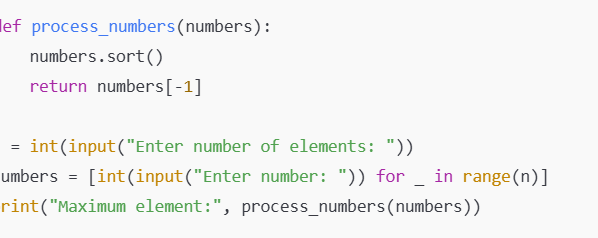
**Aim:**

To sort a list of numbers using an efficient algorithm and find the maximum element from the sorted list.

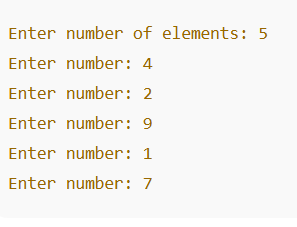
**Algorithm:**

1. Read the number of elements (n).
2. Read n integers and store them in a list.
3. Sort the list using an efficient sorting algorithm (like Timsort).
4. Return the last element of the sorted list as the maximum.

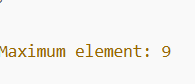
**Code:**

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**Input:**

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**Output:**

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**Performance analysis:**

**Time Complexity: (n log n)**

**Space Complexity: O(n)**