1. **Maximum and minimum value sequence for all numbers in a list**

**Code:**

#include <stdio.h>

void minMaxSequence(int arr[], int n) {

int min\_so\_far = arr[0];

int max\_so\_far = arr[0];

for (int i = 0; i < n; i++) {

if (arr[i] < min\_so\_far)

min\_so\_far = arr[i];

if (arr[i] > max\_so\_far)

max\_so\_far = arr[i];

printf("Minimum sequence value for %d: %d\n", arr[i], min\_so\_far);

printf("Maximum sequence value for %d: %d\n", arr[i], max\_so\_far);

}

}

int main() {

int n;

printf("Enter the number of elements in the list: ");

scanf("%d", &n);

int arr[n];

printf("Enter the elements of the list:\n");

for (int i = 0; i < n; i++) {

scanf("%d", &arr[i]);

}

printf("\nMinimum and maximum value sequence for each number in the list:\n");

minMaxSequence(arr, n);

return 0;

}

**Output:**

Enter the number of elements in the list: 9

Enter the elements of the list:

8

4

8

4

6

0

9

9

6

Minimum and maximum value sequence for each number in the list:

Minimum sequence value for 8: 8

Maximum sequence value for 8: 8

Minimum sequence value for 4: 4

Maximum sequence value for 4: 8

Minimum sequence value for 8: 4

Maximum sequence value for 8: 8

Minimum sequence value for 4: 4

Maximum sequence value for 4: 8

Minimum sequence value for 6: 4

Maximum sequence value for 6: 8

Minimum sequence value for 0: 0

Maximum sequence value for 0: 8

Minimum sequence value for 9: 0

Maximum sequence value for 9: 9

Minimum sequence value for 9: 0

Maximum sequence value for 9: 9

Minimum sequence value for 6: 0

Maximum sequence value for 6: 9

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Process exited after 13.16 seconds with return value 0

Press any key to continue . . .

