QUESTION

Write a C program to arrange a series of numbers using Insertion Sort

PROGRAM

main.c

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```c
#include <stdio.h>
void insertionSort(int arr[], int n) {
    for (int i = 1; i < n; i++) {
        int key = arr[i];
        int j = i - 1;
        while (j >= 0 && arr[j] > key) {
            arr[j + 1] = arr[j];
            j--;
        }
        arr[j + 1] = key;
    }
}
void printArray(int arr[], int n) {
    for (int i = 0; i < n; i++)
        printf("%d ", arr[i]);
    printf("\n");
}
int main() {
    int n;
    printf("Enter the number of elements: ");
    scanf("%d", &n);
    int arr[n];
    printf("Enter the elements:\n");
    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }
    printf("Unsorted array: ");
    printArray(arr, n);
    insertionSort(arr, n);
    printf("Sorted array: ");
    printArray(arr, n);
    return 0;
}
```

OUTPUT

```
Enter the number of elements: 6
Enter the elements:
80 56 26 8 0 95
Unsorted array: 80 56 26 8 0 95
Sorted array: 0 8 26 56 80 95


=== Code Execution Successful ===
```