1. Bubble sort

Code:

#include <stdio.h>

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

int i, j, temp;

for (i = 0; i < n - 1; i++) {

for (j = 0; j < n - i - 1; j++) {

if (arr[j] > arr[j + 1]) {

temp = arr[j];

arr[j] = arr[j + 1];

arr[j + 1] = temp;

}

}

}

}

int main() {

int arr[100], n, i;

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

scanf("%d", &n);

printf("Enter %d elements:\n", n);

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

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

}

bubbleSort(arr, n);

printf("Array after sorting: ");

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

printf("%d ", arr[i]);

}

printf("\n");

return 0;

}

Output:

Enter the number of elements in the array: 10

Enter 10 elements:

6 3 0 5 9 6 6 7 4 2

Array after sorting: 0 2 3 4 5 6 6 6 7 9

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Process exited after 9.437 seconds with return value 0

Press any key to continue . . .

