

Program - 11

Title : Write a Program to Sort the set of elements by using Bubble Sort

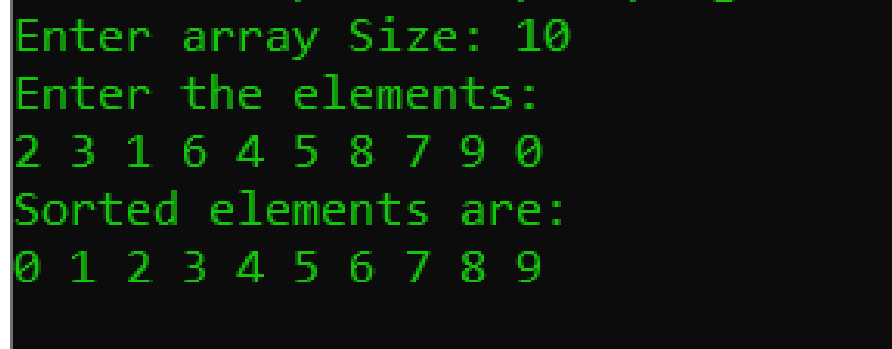
Code:

```
#include <stdio.h>

void bubble_sort(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 n, i;
    printf("Enter array Size: ");
    scanf("%d", &n);
    int arr[n];
    printf("Enter the elements:\n");
    for (i = 0; i < n; i++)
    {
        scanf("%d", &arr[i]);
    }
    bubble_sort(arr, n);
    printf("Sorted elements are:\n");
    for (i = 0; i < n; i++)
    {
        printf("%d ", arr[i]);
    }
    printf("\n");
    return 0;
}
```

Output:

A screenshot of a terminal window with a black background and green text. It shows the output of the bubble sort program. The first line is 'Enter array Size: 10'. The second line is 'Enter the elements:'. The third line shows the input array: '2 3 1 6 4 5 8 7 9 0'. The fourth line is 'Sorted elements are:'. The fifth line shows the sorted array: '0 1 2 3 4 5 6 7 8 9'.

```
Enter array Size: 10
Enter the elements:
2 3 1 6 4 5 8 7 9 0
Sorted elements are:
0 1 2 3 4 5 6 7 8 9
```

Date : __/__/__	Teacher Sign