

# Experiment

OBJECTIVE: Write a program for bubble sort

PROGRAM:

```
#include <stdio.h>

void swap(int *xp, int *yp)
{
    int temp = *xp;
    *xp = *yp;
    *yp = temp;
}

void bubbleSort(int arr[], int n)
{
    int i, j;
    for (i = 0; i < n-1; i++)
        for (j = 0; j < n-i-1; j++)
            if (arr[j] > arr[j+1])
                swap(&arr[j], &arr[j+1]);
}

void printArray(int arr[], int size)
{
    int i;
    for (i=0; i < size; i++)
        printf("%d ", arr[i]);
    printf("\n");
}

int main()
{
    int arr[] = {64, 34, 25, 12, 22, 11, 90};
    int n = sizeof(arr)/sizeof(arr[0]);
    printf("unsorted array:\n");
    printArray(arr,n);
    bubbleSort(arr, n);
    printf("Sorted array: \n");
    printArray(arr, n);
    return 0;
}
```

OUTPUT:

```
C:\data structure bootcamp using c\array asignment\bubblesort.exe
unsorted array:
64 34 25 12 22 11 90
Sorted array:
11 12 22 25 34 64 90

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Process exited after 0.0489 seconds with return value 0
Press any key to continue . . .
```

DEV VARSHNEY