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An Autonomous Institute Permanently Affiliated to the University of Mumbai

EXPERIMENT NO. 8 DSA

BUBBLE SORT

CODE:

```
#include <stdio.h>

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

void bubbleSort(int arr[], int n) {
    for (int i = 0; i < n - 1; i++) {
        for (int 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) {
    for (int i = 0; i < size; i++) {
        printf("%d ", arr[i]);
    }
    printf("\n");
}

int main() {
    int arr[] = {46, 15, 25, 19, 68, 11, 79};
    int n = sizeof(arr) / sizeof(arr[0]);
    printf("Original array: \n");
    printArray(arr, n);

    bubbleSort(arr, n);

    printf("Sorted array: \n");
    printArray(arr, n);

    return 0;
}
```

OUTPUT:

```
adminit@a00-G7-Microtower-PC:~$ gcc selection.c
adminit@a00-G7-Microtower-PC:~$ ./a.out
Original array:
46 15 25 19 68 11 79
Sorted array:
11 15 19 25 46 68 79
adminit@a00-G7-Microtower-PC:~$
```

SANA DHOLAM

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