

```

#include <stdio.h>

void swap(int* a, int* b) {
    int t = *a;
    *a = *b;
    *b = t;
}

int partition(int arr[], int low, int high) {
    int pivot = arr[high];
    int i = (low - 1);

    for (int j = low; j <= high - 1; j++) {
        if (arr[j] < pivot) {
            i++;
            swap(&arr[i], &arr[j]);
        }
    }
    swap(&arr[i + 1], &arr[high]);
    return (i + 1);
}

void quickSort(int arr[], int low, int high) {
    if (low < high) {
        int pi = partition(arr, low, high);

        quickSort(arr, low, pi - 1);
        quickSort(arr, pi + 1, high);
    }
}

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

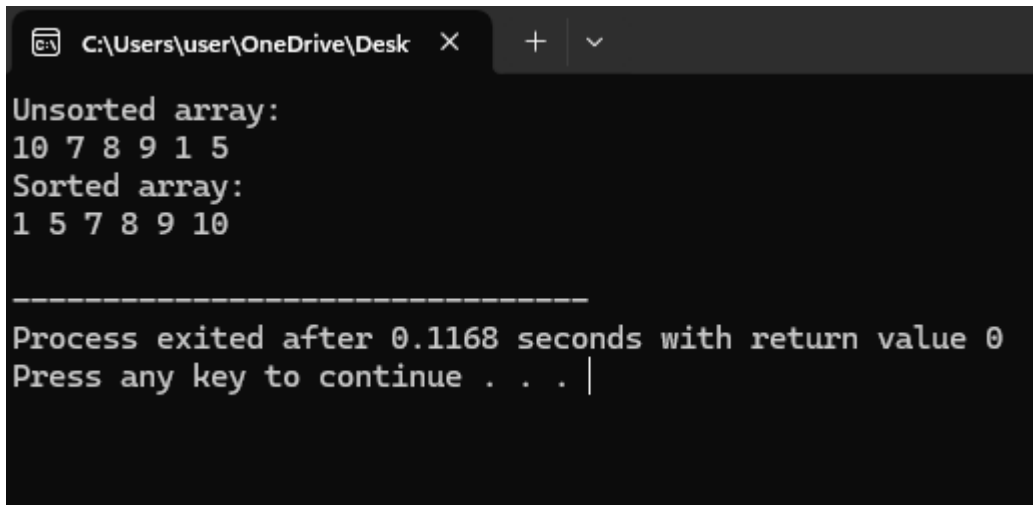
int main() {
    int arr[] = {10, 7, 8, 9, 1, 5};
    int n = sizeof(arr) / sizeof(arr[0]);
    printf("Unsorted array: \n");
    printArray(arr, n);

    quickSort(arr, 0, n - 1);

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

```

```
    return 0;  
}
```



A screenshot of a Windows command prompt window. The title bar shows the file path 'C:\Users\user\OneDrive\Desk' and standard window controls. The command prompt displays the following text: 'Unsorted array:' followed by '10 7 8 9 1 5', 'Sorted array:' followed by '1 5 7 8 9 10', a horizontal dashed line, and 'Process exited after 0.1168 seconds with return value 0'. The prompt ends with 'Press any key to continue . . . |'.

```
C:\Users\user\OneDrive\Desk >  
Unsorted array:  
10 7 8 9 1 5  
Sorted array:  
1 5 7 8 9 10  
-----  
Process exited after 0.1168 seconds with return value 0  
Press any key to continue . . . |
```