

eclipse-workspace - PracticeProject8/src/QuickSort.java - Eclipse IDE

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```
1
2 class QuickSort {
3     int partition(int arr[], int low, int high)
4     {
5         int pivot = arr[high];
6         int i = (low-1); // index of smaller element
7         for (int j=low; j<high; j++)
8         {
9             if (arr[j] <= pivot)
10            {
11                i++;
12            }
13            // swap arr[i] and arr[j]
14            int temp = arr[i];
15            arr[i] = arr[j];
16            arr[j] = temp;
17        }
18    }
19
20    // swap arr[i+1] and arr[high] (or pivot)
21    int temp = arr[i+1];
22    arr[i+1] = arr[high];
23    arr[high] = temp;
24
25    return i+1;
26 }
27
28
29
30 void sort(int arr[], int low, int high)
31 {
32     if (low < high)
33     {
34         int pi = partition(arr, low, high);
35
36
37         sort(arr, low, pi-1);
38         sort(arr, pi+1, high);
39     }
40 }
41
42 static void printArray(int arr[])
43 {
```

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```
23     arr[high] = temp;
24
25     return i+1;
26 }
27
28
29
30 void sort(int arr[], int low, int high)
31 {
32     if (low < high)
33     {
34
35         int pi = partition(arr, low, high);
36
37
38         sort(arr, low, pi-1);
39         sort(arr, pi+1, high);
40     }
41 }
42
43 static void printArray(int arr[])
44 {
45     int n = arr.length;
46     for (int i=0; i<n; ++i)
47         System.out.print(arr[i]+" ");
48     System.out.println();
49 }
50
51 // Driver program
52
53 public static void main(String[] args) {
54     // TODO Auto-generated method stub
55     int arr[] = {10, 7, 8, 9, 1, 5};
56     int n = arr.length;
57
58     QuickSort ob = new QuickSort();
59     ob.sort(arr, 0, n-1);
60
61     System.out.println("sorted array");
62     printArray(arr);
63 }
64 }
65 }
```

Problems @ Javadoc Declaration Console ×

<terminated> QuickSort [Java Application] C:\Users\Srinivas\.p2\pool\plug

sorted array

1 5 7 8 9 10