**package** com;

**class** QuickSort {

**int** partition(**int** arr[], **int** low, **int** high)

{

**int** pivot = arr[high];

**int** i = (low-1);

**for** (**int** j=low; j<high; j++) {

**if** (arr[j] <= pivot) {

i++;

**int** temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

}

}

**int** temp = arr[i+1];

arr[i+1] = arr[high];

arr[high] = temp;

**return** i+1;

}

**void** sort(**int** arr[], **int** low, **int** high) {

**if** (low < high) {

**int** pi = partition(arr, low, high);

sort(arr, low, pi-1);

sort(arr, pi+1, high);

}

}

**static** **void** printArray(**int** arr[]) {

**int** n = arr.length;

**for** (**int** i=0; i<n; ++i)

System.***out***.print(arr[i]+" ");

System.***out***.println();

}

**public** **static** **void** main(String args[]) {

**int** arr[] = {5,2,40,19,7,1};

**int** n = arr.length;

QuickSort ob = **new** QuickSort();

ob.sort(arr, 0, n-1);

System.***out***.println("sorted array");

*printArray*(arr);

}

}

