**package** Sorting\_Algorithms;

**public class** QuickSortAlgorithm {

**public void** quickSort(**int**[] inputArray, **int** lowerIndex, **int** higherIndex)

{

**if** (lowerIndex<higherIndex)

{

**int** location = partition(inputArray,lowerIndex,higherIndex);

quickSort(inputArray,lowerIndex,location-1);

quickSort(inputArray,location+1,higherIndex);

}

}

**public int** partition(**int**[] inputArray,**int** lowerIndex,**int** higherIndex)

{

**int** pivot = inputArray[lowerIndex];

**int** start = lowerIndex;

**int** end = higherIndex;

**int** temp = 0;

**int** temp1 = 0;

**while** (start<end)

{

**while** (pivot>=inputArray[start])

{

start = start + 1;

}

**while** (inputArray[end]>pivot)

{

end = end -1;

}

**if** (start<end)

{

temp = inputArray[start];

inputArray[start] = inputArray[end];

inputArray[end] = temp;

}

}

temp1 = inputArray[end];

inputArray[end] = inputArray[lowerIndex];

inputArray[lowerIndex] = temp1;

**return** end;

}

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

**int**[] inputArray = {4,3,1,2,0,6};

QuickSortAlgorithm objectQuickSort = **new** QuickSortAlgorithm();

objectQuickSort.quickSort(inputArray,0,inputArray.**length**-1);

**for** (**int** i : inputArray)

{

System.***out***.print(i+**" "**);

}

}

}