

```
public class QuickSortDesc implements Problem, Solution {  
  
    private int[] arr;  
  
    private int first, last;  
  
    public QuickSortDesc(int[]larr, int first, int last) {  
        this.arr = arr;  
        this.first = first;  
        this.last = last;  
    }  
  
    public int getFirst () {  
        return first;  
    }  
  
    public int getLast () {  
        return last;  
    }  
  
    public int[] getArr () {  
        return arr;  
    }  
}
```