

## 6. Writing a program in Java implementing the insertion sort algorithm

```
package javafsd4;

public class insertionSort {
    public static void sort(int[] arr) {
        for(int i=1;i<arr.length;i++) {
            for(int j=i;j>0;j--) {
                if(arr[j]<arr[j-1]) {
                    int temp=arr[j];
                    arr[j]=arr[j-1];
                    arr[j-1]=temp;
                }
                else
                    break;
            }
        }
    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int[] arr= {5,1,8,4,2,9,6};
        System.out.println(".....INSERTION SORT.....");
        System.out.println("Before sorting:");
        for(int num:arr) {
            System.out.print(num+" ");
        }

        insertionSort.sort(arr);

        System.out.println();
        System.out.println("After sorting:");
        for(int num:arr) {
            System.out.print(num+" ");
        }
    }
}
```

## OUTPUT

```
Console ×  
<terminated> insertionSort [Java Application] C:\Users\JOTHIKA\p2\pool\plugins\org.eclipse.justj.open  
.....INSERTION SORT.....  
Before sorting:  
5 1 8 4 2 9 6  
After sorting:  
1 2 4 5 6 8 9
```