

```
import java.util.Arrays;

public class InsertionSort {

    public static void main(String[] args) {

        int[] arr = new int[10];
        for (int i = 0; i < arr.length; i++) {
            arr[i] = ((int) (Math.random() * 11));
        }
        System.out.println(Arrays.toString(arr));

        int[] sortArr = insertionSort(arr);
        System.out.println(Arrays.toString(sortArr));

    }

    public static int[] insertionSort(int[] arr) {
        int i, j, newValue;
        for (i = 1; i < arr.length; i++) {
            newValue = arr[i];
            j = i;
            while (j > 0 && arr[j - 1] > newValue) {
                arr[j] = arr[j - 1];
                j--;
            }
            arr[j] = newValue;
        }
        return arr;
    }

}
```