12 B. INSERTION SORT

```
package sorting;

public class InsertionSort {

	public static void insertionSort(int[] array) {
	   int n = array.length;

	   for (int i = 1; i < n; i++) {
	      int key = array[i];
	      int j = i - 1;
// Move elements of array[0..i-1] that are greater than key to one position ahead
of their current position
	      while (j >= 0 && array[j] > key) {
	         array[j + 1] = array[j];
	         j = j - 1;
	      }
	      // Place the key in its correct position
	      array[j + 1] = key;
	   }
	}

	public static void main(String[] args) {
	   int[] array = {64, 25, 12, 22, 11};

	   System.out.println("Original array:");
	   for(int i=0;i<array.length;i++) {
	     System.out.print(array[i]+" ");
	   }

	   insertionSort(array);

	   System.out.println("\nSorted array:");
	   for(int i=0;i<array.length;i++) {
	     System.out.print(array[i]+" ");
	   }
	}
}
```