4.Writing a program in Java implementing the selection sort algorithm

```
package javafsd4;

public class selectionSort {

	public static void sort(int[] arr) {

		for(int i=0;i<arr.length;i++) { // position fix
			int Index=i;
			for(int j=i+1;j<arr.length;j++) //select min value
			{
				if(arr[j]<arr[Index])
				{
					Index=j;
				}
			}
			//swap i,minindex
			int temp=arr[i];
			arr[i]=arr[Index];
			arr[Index]=temp;
		}

	}

	public  static void main(String[] args) {
		// TODO Auto-generated method stub
int[] arr= {9,14,43,11,58,22,1,8};
System.out.println(".....SELECTION SORT.....");
System.out.println("Before sorting:");
for(int num:arr) {
	System.out.print(num+" ");
}

selectionSort.sort(arr);
```

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

        }

}
```

OUTPUT