

#### 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+" ");
        }

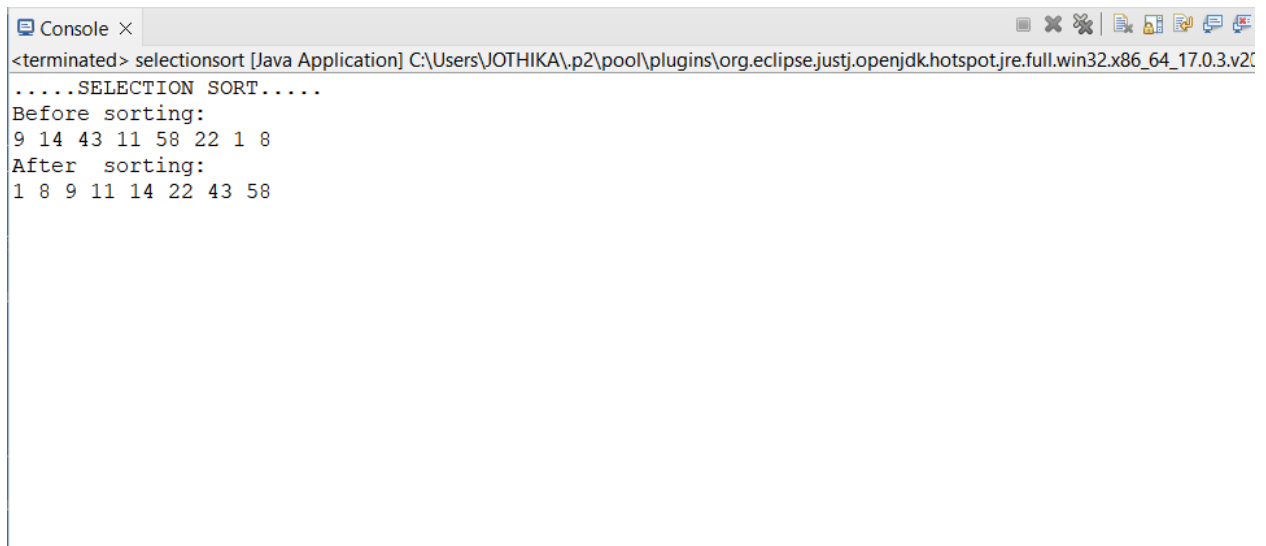
        selectionSort.sort(arr);
    }
}
```

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

}

}
```

## OUTPUT



```
<terminated> selectionsort [Java Application] C:\Users\JOTHIKA\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.3.v2f
.....SELECTION SORT.....
Before sorting:
9 14 43 11 58 22 1 8
After sorting:
1 8 9 11 14 22 43 58
```