

Phase-1 Practice Project: Assisted Practice

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

Source code:

```
public class SelectionSort {
    void sort(int arr[])
    {
        int n=arr.length;
        for(int i=0;i<n-1;i++)
        {
            int min_idx=i;
            for (int j=i+1;j<n;j++) {
                if(arr[j]<arr[min_idx])
                    min_idx=j;
            }
            int temp=arr[min_idx];
            arr[min_idx]=arr[i];
            arr[i]=temp;
        }
    }
    void printArray(int arr[])
    {
        int n=arr.length;
        for(int i=0;i<n;++i)
            System.out.print(arr[i]+" ");
        System.out.println();
    }

    public static void main(String args[]) {
        SelectionSort ob=new SelectionSort();
        int arr[] = {46,52,21,76,11};
        ob.sort(arr);
        System.out.println("Sorted array");
        ob.printArray(arr);
    }
}
```

Output:

