Lab Assignment – 2

WAP for Insertion sort

Insertion Sort Code:

```
package rec_Program;

import java.util.*;

public class InsertionSort {

    public static void insertionSort(int[] arr)
    {
        for (int i = 1; i < arr.length; i++)
        {
            int value = arr[i];
            int j = i;

            while (j > 0 && arr[j - 1] > value)
            {
                arr[j] = arr[j - 1];
                j--;
            }

            arr[j] = value;
        }
    }

     public static void main(String[] args) {
          // TODO Auto-generated method stub
          int a, l, array[];
           Scanner s = new Scanner(System.in);
           System.out.println("enter array length: ");
           l = s.nextInt();
           array = new int[l];
           System.out.println("enter " + l + " elements");
           for(a = 0; a < l; a++)
           {
              array[a] = s.nextInt();
           }
```

```
            insertionSort(array);
            System.out.println("Sorted Array");
            System.out.println(Arrays.toString(array));
    }

}
```

INSERTION SORT CODE OUTPUT: