```java
public class BucketSort {
    public static void bucketSort(int[] a){
        int n = a.length;
        int max = getMax(a);
        int[] bucket = new int[max+1];
        // Intializing bucket arrays
        for (int i = 0; i <= max; i++)
        {
            bucket[i] = 0;
        }
        for (int i = 0; i < n; i++)
        {
            bucket[a[i]]++;
        }
        for (int i = 0, j = 0; i <= max; i++)
        {
            while (bucket[i] > 0)
            {
                a[j++] = i;
                bucket[i]--;
            }
        }

    }
```

n is the size of the input array

Initialize a bucket array of size max value of input array + 1

Let all value in the bucket be zero

Index of the values in the input array

Make all indexes of values of the input array be 1

Iterate through the bucket array. Any index that has value 1 in the bucket array will be inserted into the inputed array

(index is inserted not 1)