1.Program:

```java
import java.util.*;

public class Main {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        int n=sc.nextInt();
        int[] arr=new int[n];
        Set<Integer>s=new HashSet<>();
        for(int i=0;i<n;i++)
        {
            arr[i]=sc.nextInt();
        }
        int index=0;
        for(int i=0;i<arr.length;i++)
        {
            if(arr[i]!=0)
            {
                arr[index++]=arr[i];
            }

        }
        while(index<n)
        {
            arr[index++]=0;
        }
        for(int i=0;i<n;i++)
        {
            System.out.print(arr[i]+" " );
        }

    }
}
```

2.Program:

```java
import java.util.*;

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String s = sc.next();
        long n = sc.nextLong();
```

```java
        long countInS = 0;
        for (char c : s.toCharArray()) {
            if (c == 'a') countInS++;
        }

        long fullRepeats = n / s.length();
        long remainder = n % s.length();

        long totalCount = fullRepeats * countInS;

        for (int i = 0; i < remainder; i++) {
            if (s.charAt(i) == 'a') {
                totalCount++;
            }
        }

        System.out.println(totalCount);
    }
}
```