

1. Find first last repeating character in a given string.

```
package JAVA;
```

```
public class lastrepet
```

```
{
```

```
    public static void main(String[] args)
```

```
    {
```

```
        String str ="language";
```

```
        int l=str.length();
```

```
        String str1 ="";
```

```
        for(int i =0;i<l;i++)
```

```
        {
```

```
            for(int j=0;j<l-1;j++)
```

```
            {
```

```
                if(str.charAt(i)==str.charAt(j))
```

```
                {
```

```
                    str1=str1+str.charAt(i);
```

```
                }
```

```
            }
```

```
        }
```

```
        int l1=str1.length();
```

```
        System.out.println("The last repeated charechter in the string is:" +  
str1.charAt(l1-1));
```

```
    }
```

```
}
```

2. Reverse words in a given string without using predefined functions.

```
package JAVA;
```

```
public class reverseword
```

```
{
```

```
    public static void main(String[] args)
```

```
    {
```

```
        String str="i love programming very much";
```

```
        String res="";
```

```
        int l=str.length();
```

```
        String words[] = str.split("\\s");
```

```
        for (int i = 0; i < words.length; i++) {
```

```
            if (i == words.length - 1)
```

```
                res = words[i] + res;
```

```
            else
```

```
                res = " " + words[i] + res;
```

```
        }
```

```
        System.out.print("Reversed string : " + res);
```

```
    }
```

```
}
```

3. Find count of distinct subsequences in a string.

```
package JAVA;
```

```
public class cousub
```

```
{
```

```
    public static void main(String[] args)
```

```
    {
```

```
        String str = "var";
```

```
        int n = str.length();
```

```
        int[] dp = new int[n + 1];
```

```
        dp[0] = 1;
```

```
        int[] lastOcc = new int[256];
```

```
        for (int i = 0; i < 256; i++)
```

```
        {
```

```
            lastOcc[i] = -1;
```

```
        }
```

```
        for (int i = 1; i <= n; i++)
```

```
        {
```

```
            char cc = str.charAt(i - 1);
```

```
            dp[i] = 2 * dp[i - 1];
```

```
            if (lastOcc[cc] != -1) {
```

```
                dp[i] -= dp[lastOcc[cc]];
```

```
            }
```

```
            lastOcc[cc] = i - 1;
```

```
        }
```

```
        System.out.println(dp[n]);
```

```
    }
```