Passwords With Constraints

You are given n, k and n chars. You need to print all different passwords in sorted order

Password should contain

1) atleast one special char from the list [@, $, &, #]

2) atleast one alphabet

Input Format

n k

n chars

Constraints

1 <= N <= 50

1 <= K <= 10

Output Format

All passwords space separated and sorted

Sample Input 0

```
3 2
a b c
```

Sample Output 0

```
#a #b #c $a $b $c &a &b &c @a @b @c a# a$ a& a@ b# b$ b& b@ c# c$ c& c@
```

Sample Input 1

```
3 2
a a b
```

Sample Output 1

```
#a #b $a $b &a &b @a @b a# a$ a& a@ b# b$ b& b@
```