

Solution-2

Ankit Kumar Rai

Roll No -

191500121 (19)

```
l = list(map(eval, input().split()))
```

```
K = int(input())
```

```
l1 = []
```

```
l2 = []
```

```
l3 = []
```

```
l4 = []
```

```
l5 = []
```

```
l6 = []
```

```
a, b = l[-1]
```

```
for i in range(97, ord(a)+1):
```

```
    for j in range(len(l)):
```

```
        if l[j][0] == chr(i):
```

```
            l1.append(l[j][1])
```

```
l2.append(l1)
```

```
l1 = []
```

```
for i in range(len(l2)):
```

```
    for j in range(i+1, len(l2)):
```

```
        l3.append((chr(i+97), chr(j+97)))
```

```
    for z in range(len(l2[i])):
```

```
        if l2[i][z] in l2[j]:
```

```
            l3.append(l2[i][z])
```

```
l4.append(l3)
```

```
l3 = []
```

```
l4.sort(key=len, reverse=True)
```

```
max_length = len(l4[0])
```

```
for i in l4:  
    if len(i) == max_length:  
        l5.append(i)
```

```
def apra_fun(lst):  
    a, b = lst[0]  
    d = max(len(l1[ord(a)-97]), len(l2[ord(b)-97]))  
    return (d - len(lst) + 1)  
l5.sort(key=apra_fun)
```

```
for i in range(k):  
    l6.append(l5[l1][0])  
    print(l6)
```