D21CS110 SWET SONI





# **Faculty of Technology and Engineering**

## U & P U. Patel Department of Computer Engineering

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#### **Practical List**

Academic Year	:	2021-22	Semester	:	4
Course code	:	CE259	Course name		Programming in Python

AIM: You are given n words. Some words may repeat. For each word, output its number of occurrences. The output order should correspond with the input order of appearance of the word. See the sample input/output for clarification.

Note: Each input line ends with a "\n" character.

**Constraints:** 

 $1 \le n \le 10^5$ 

The sum of the lengths of all the words do not exceed 10<sup>6</sup>

All the words are composed of lowercase English letters only.

**Input Format:** 

The first line contains the integer, n.

The next n lines each contain a word.

**Output Format:** 

Output 2 lines.

On the first line, output the number of distinct words from the input.

On the second line, output the number of occurrences for each distinct word according to their appearance in the input. D21CS110 SWET SONI

### **CODE:**

```
import collections;

N = int(input())
D = collections.OrderedDict()

for i in range(N):
    WORD = input()
    if WORD in D:
        D[WORD] +=1
    else:
        D[WORD] = 1

print(len(D));

for K_V in D.items():
    print(V_end_=_" ");
```

# **OUTPUT:**

```
4
BCDEF
ABCDEFG
BCDE
BCDEF
3
2 1 1
```