

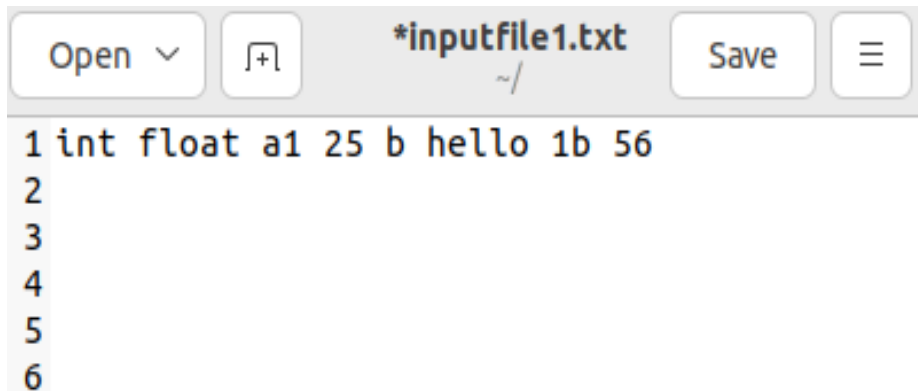
Assignment 4 – 03 - April - 2023

Write the Lex program for the following :

1 To Recognize different tokens in the given input file : **Keywords, Identifiers, Constants, Operators and Punctuations.**

(4M)

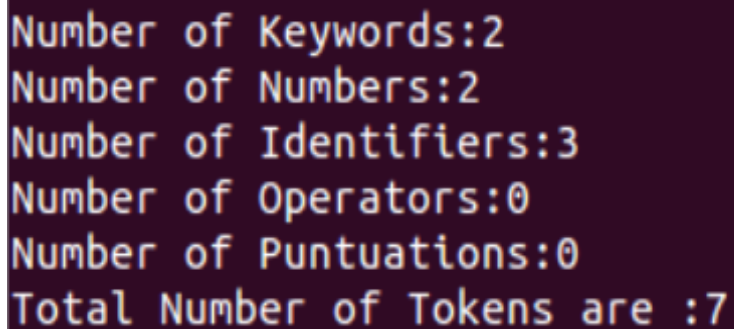
Input



The screenshot shows a text editor window with a title bar containing "Open", a file icon, "*inputfile1.txt", a "Save" button, and a menu icon. The editor area displays the following text:

```
1 int float a1 25 b hello 1b 56
2
3
4
5
6
```

Output



The screenshot shows the output of the Lex program, displaying the count of various tokens:

```
Number of Keywords:2
Number of Numbers:2
Number of Identifiers:3
Number of Operators:0
Number of Puntuations:0
Total Number of Tokens are :7
```

A new video about the recent developments in coding has been published on social media. After some time, it is seen that there are N comments added. The admin wants to search for the keyword K in the comment section and the sequence of the keyword. (6M)

[Note : input file containing comments can also be considered (optional).]

Function description

Consider the function *solution()*. The function takes the following 3 parameters and returns solution:

- N : Represents the number of comments.
- K : Represents the keyword.
- *comments* : Represents the array of comments.

Input format

The first line contains N denoting the number of comments.

The second line contains K denoting the keyword.

Each of the next N lines contains a string denoting a comment.

Output format

Print an integer representing the number of comments containing the keyword, -1 in case of unacceptable comments .

Constraints

$$1 \leq N \leq 10^5$$

$$1 \leq |K| \leq 10$$

$$1 \leq \text{sum of length of all comments} \leq 10^5$$

K and Comments contain only lower or upper case characters and underscores.

<p><u>Sample Input</u></p> <p>2 good The_video_is_good Informative</p> <p><u>Sample output</u></p> <p>1</p>	<p><u>Sample Input</u></p> <p>4 helpful Most_expensive_topic_now_a_days It_was_really_helpful This_is_very_helpful_video Productive_talk</p> <p><u>Sample output</u></p> <p>2</p>	<p><u>Sample Input</u></p> <p>2 usefull #Most_wanted_and_usefull_video Thanks a lot...</p> <p><u>Sample output</u></p> <p>-1</p>
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