

# Rajalakshmi Engineering College

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## 2024\_28\_III\_OOPS Using Java Lab

### 2028\_REC\_OOPS using Java\_Week 4\_Q4

Attempt : 1  
Total Mark : 10  
Marks Obtained : 10

#### Section 1 : Coding

##### 1. Problem Statement

Arjun is learning how to filter words from a sentence based on grammar rules. He wants to identify the valid words in a sentence.

A word is considered valid if it satisfies all these conditions:

The word contains only alphabets (a-z, A-Z). The word length is at least 2 characters. The word should not contain digits or special characters.

Your task is to read a sentence and print all the valid words in it.

##### ***Input Format***

The input contains a single line containing a sentence S.

##### ***Output Format***

The output prints all the valid words separated by spaces.

If no valid word exists, print "No valid words."

Refer to the sample output for formatting specifications.

### **Sample Test Case**

Input: Hello world1 123 ab" @#\$ Hi

Output: Hello Hi

### **Answer**

```
import java.util.*;
class Solution{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        String str = sc.nextLine();
        boolean a = false;
        for(String s : str.split(" ")){
            if(s.length() < 2){
                continue;
            }
            if(valid(s)){
                System.out.print(s+" ");
                a = true;
            }
        }
        if(!a){
            System.out.print("No valid words.");
        }
    }
    public static boolean valid(String s){
        for(char i : s.toCharArray()){
            if(!((i >= 'a' && i <= 'z') || (i >= 'A' && i <= 'Z'))){
                return false;
            }
        }
        return true;
    }
}
```

Status : Correct

Marks : 10/10