

# 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**

```
// You are using Java
import java.util.Scanner;
public class Main{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        String s= sc.nextLine();
        String[] str=s.split(" ");
        int flag=0;
        for(int i=0;i<str.length;i++){
            int c=0;
            int d=0;
            for(int j=0;j<str[i].length();j++){
                char ch=str[i].charAt(j);
                if((ch>='a'&&ch<='z')||(ch>='A'&&ch<='Z'))
                {
                    c++;
                }
                else
                {
                    d++;
                }
            }
            if(c>=2&&d==0)
            {
                System.out.print(str[i]+" ");
                flag=1;
            }
        }
    }
}
```

```
    if(flag==0)
    {
        System.out.print("No valid words.");
    }
}
```

**Status :** Correct

**Marks : 10/10**