

# Rajalakshmi Engineering College

Name: Pavithra S  
Email: 241001162@rajalakshmi.edu.in  
Roll no: 241001162  
Phone: 8122081287  
Branch: REC  
Department: IT - Section 2  
Batch: 2028  
Degree: B.E - IT

Scan to verify results



## 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.io.*;
import java.util.Scanner;

class Main{
    public static void main(String[] args){
        Scanner sc=new Scanner(System.in);
        String s=sc.nextLine();
        String[] words=s.split(" ");

        String result="";
        boolean found=false;

        for(String i:words){
            boolean valid=true;

            if(i.length()<2)
                valid=false;
            else{
                for(int j=0;j<i.length();j++){
                    if(!Character.isLetter(i.charAt(j))){
                        valid=false;
                        break;
                    }
                }
            }
            if(valid){
                result+=i+" ";
            }
        }
    }
}
```

```
        found=true;
    }
    if(found)
        System.out.println(result);
    else
        System.out.println("No valid words.");
}
}
```

**Status : Correct**

**Marks : 10/10**