

# Rajalakshmi Engineering College

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Batch: 2028

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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.*;
public class Main
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        String sentence = sc.nextLine();
        String [] words = sentence.split(" ");
        boolean a = false;
        for(String c : words)
        {
            if(c.matches("[a-zA-Z]{2,}"))
            {
                if(a)
                {
                    System.out.printf(" ");
                }
                System.out.print(c);
                a = true;
            }
        }
        if(!a)
        {
            System.out.printf("No valid words . ");
        }
    }
}
```

```
        sc.close();  
    }  
}
```

**Status : Correct**

**Marks : 10/10**