

# 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.Scanner;
```

```
class Main {  
    public static void main(String[] args) {  
        Scanner scanner = new Scanner(System.in);  
        String sentence = scanner.nextLine();  
        scanner.close();  
  
        String[] words = sentence.split(" ");  
        StringBuilder result = new StringBuilder();  
        boolean found = false;  
  
        for (String word : words) {  
            if (word.length() >= 2 && word.matches("[a-zA-Z]+")) {  
                result.append(word).append(" ");  
                found = true;  
            }  
        }  
  
        if (found) {  
            System.out.println(result.toString().trim());  
        } else {  
            System.out.println("No valid words.");  
        }  
    }  
}
```

**Status : Correct**

**Marks : 10/10**