

# 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**

```
import java.util.Scanner;

public class Main {
    public static boolean check(String a) {
        int len = a.length();
        if(len < 2) return false;
        for(int i = 0; i < len; i++) {
            char b = a.charAt(i);
            if(!Character.isLetter(b)) return false;
        }
        return true;
    }

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String l = sc.nextLine();
        String[] w = l.split(" ");
        int r = 0;
        for(String a : w) {
            if(check(a)) {
                r++;
                System.out.print(a + " ");
            }
        }
        if(r == 0) System.out.println("No valid words.");
    }
}
```

**Status : Correct**

**Marks : 10/10**