

# Rajalakshmi Engineering College

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Batch: 2028

Degree: B.E - CSE

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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;
class main{
    public static void main(String args[]){
        Scanner s=new Scanner(System.in);
        String a=s.nextLine();
        String arr[]=a.split(" ");
        int p=0;
        int o=0;
        for(int i=0;i<arr.length;i++){
            if(arr[i].length()>=2){
                for(int j=0;j<arr[i].length();j++){
                    char c=arr[i].charAt(j);
                    if((c>='A'&&c<='Z')||(c>='a'&&c<='z')){
                        }
                    else{
                        p=1;
                        break;
                    }
                }
            if(p!=1){
                System.out.print(arr[i]+" ");
                o=1;
            }
        }
        p=0;
    }
    if(o==0){
}
```

```
        } } } System.out.print("No valid words.");  
    } } }
```

**Status : Correct**

**Marks : 10/10**