

# Rajalakshmi Engineering College

Name: SARVESHVARAN D  
Email: 240701480@rajalakshmi.edu.in  
Roll no: 240701480  
Phone: 8122614302  
Branch: REC  
Department: CSE - Section 5  
Batch: 2028  
Degree: B.E - CSE

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**

```
import java.util.Scanner;
class main{
    public static void main(String args[])
    {
        Scanner scan=new Scanner(System.in);
        String sent=scan.nextLine();
        String[] arr=sent.split(" ");
        int not_valid=0;
        for(int i=0;i<arr.length;i++)
        {
            int c=0;
            if(arr[i].length()>1)
                c++;
            boolean sp=true;
            for(int j=0;j<arr[i].length();j++)
            {
                if(!Character.isAlphabetic(arr[i].charAt(j)))
                {
                    sp=false;
                }
            }
            if(c==1 && sp)
            {
                System.out.print(arr[i]+" ");
            }
            else
            {
                not_valid++;
            }
        }
    }
}
```

```
    }  
    }  
    if(arr.length==not_valid)  
    {  
        System.out.print("No valid words.");  
    }  
    }  
}
```

**Status :** Correct

**Marks :** 10/10