

# Rajalakshmi Engineering College

Name: Abishek D  
Email: 240701013@rajalakshmi.edu.in  
Roll no: 240701013  
Phone: 8825816124  
Branch: REC  
Department: CSE - Section 10  
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.*;

class main{
    public static void main(String[] args)
    {
        Scanner in=new Scanner(System.in);
        String s=in.nextLine();

        String[] arr= s.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