

# Rajalakshmi Engineering College

Name: Sugasriyaram S T  
Email: 241001272@rajalakshmi.edu.in  
Roll no: 241001272  
Phone: 9043035295  
Branch: REC  
Department: IT - Section 4  
Batch: 2028  
Degree: B.E - IT

Scan to verify results



## 2024\_28\_III\_OOPS Using Java Lab

### 2028\_REC\_OOPS using Java\_Week 8\_Q3

Attempt : 1  
Total Mark : 10  
Marks Obtained : 10

#### Section 1 : Coding

##### 1. Problem Statement

In a user registration system, there is a requirement to implement a username validation module. Users attempting to register must adhere to specific criteria for their usernames to be considered valid.

Your task is to develop a program that takes user input for a desired username and validates it according to the following rules:

The username must not contain any spaces. The username must be at least 5 characters long.

Implement a custom exception, `InvalidUsernameException`, to handle cases where the entered username does not meet the specified criteria.

##### **Input Format**

The input consists of a string S, representing the desired username.

### **Output Format**

If the username is valid, print "Username is valid: [S]".

If the username is invalid:

1. If the username is short, print "Invalid Username: Username must be at least 5 characters long"
2. If the username contains spaces, print "Invalid Username: Username cannot contain spaces"

Refer to the sample output for formatting specifications.

### **Sample Test Case**

Input: John

Output: Invalid Username: Username must be at least 5 characters long

### **Answer**

```
// You are using Java
import java.util.*;
```

```
class InvalidUsernameException extends Exception{
    InvalidUsernameException(String msg){
        super(msg);
    }
}
```

```
class CheckUsername{
    public static void ValidName(String a) throws InvalidUsernameException{
        if(a.length()<5){
            throw new InvalidUsernameException("Invalid Username: Username must
be at least 5 characters long");
        }
        else if(a.contains(" ")){
            throw new InvalidUsernameException("Invalid Username: Username
cannot contain spaces");
        }
    }
}
```

```
public static void main(String[] ar){
    Scanner s=new Scanner(System.in);
    try{
        String r=s.nextLine();
        ValidName(r);
        System.out.print("Username is valid: "+r);
    }
    catch(InvalidUsernameException t){
        System.out.print(t.getMessage());
    }
    catch(Exception t){
        System.out.print("Invalid Input");
    }
    finally{
        s.close();
    }
}
```

**Status :** Correct

**Marks : 10/10**