

# 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 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***

```
import java.util.*;  
class InvalidUsernameException extends Exception{  
    InvalidUsernameException(String msg)  
    {  
        super(msg);  
    }  
}  
class Main  
{  
    public static void main(String[] args)  
    {  
        Scanner scan=new Scanner(System.in);  
        String name=scan.nextLine();  
        try  
        {  
            validateUserName(name);  
            System.out.println("Username is valid: "+name);  
        }  
        catch(InvalidUsernameException e)  
        {
```

```
        System.out.println("Invalid Username: "+e.getMessage());
    }
}
public static void validateUserName(String name) throws
InvalidUsernameException{
    if(name.length()<5)
    {
        throw new InvalidUsernameException("Username must be at least 5
characters long");
    }
    if(name.contains(" "))
    {
        throw new InvalidUsernameException("Username cannot contain
spaces");
    }
}
```

**Status :** Correct

**Marks :** 10/10