

# Rajalakshmi Engineering College

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Batch: 2028

Degree: B.E - AI & DS

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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***

```
// You are using Java
import java.util.*;
class InvalidUsernameException extends Exception{
public InvalidUsernameException(String m){
super(m);
}
}
public class Main{
public static void main(String[]a){
Scanner s=new Scanner(System.in);
String u=s.nextLine();
s.close();
try{
validateUsername(u);
System.out.println("Username is valid: "+u);
}catch(InvalidUsernameException e){
System.out.println(e.getMessage());
}
}
static void validateUsername(String u) throws InvalidUsernameException{
```

```
if(u.contains(" "))  
throw new InvalidUsernameException("Invalid Username: Username cannot  
contain spaces");  
if(u.length()<5)  
throw new InvalidUsernameException("Invalid Username: Username must be at  
least 5 characters long");  
}  
}
```

**Status : Correct**

**Marks : 10/10**