

# Rajalakshmi Engineering College

Name: Arunmozhi N  
Email: 241901008@rajalakshmi.edu.in  
Roll no: 241901008  
Phone: 9363880621  
Branch: REC  
Department: CSE (CS) - Section 1  
Batch: 2028  
Degree: B.E - CSE (CS)

Scan to verify results



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

### 2028\_REC\_OOPS using Java\_Week 8\_Q4

Attempt : 1  
Total Mark : 10  
Marks Obtained : 10

#### Section 1 : Coding

##### 1. Problem Statement

A local municipality is implementing an online voting system for a community event and wants to ensure that only eligible voters (those aged 18 or older) can participate.

Your task is to develop a program that validates the age of individuals attempting to vote online. If the user's age is below 18, the program should throw a custom exception, `InvalidAgeException`, preventing them from casting their vote. If the input is invalid, catch the appropriate `InputMismatchException` and print the in-built exception message.

##### ***Input Format***

The input consists of an integer representing the age.

##### ***Output Format***

If the age is 18 or older, print "Eligible to vote"

If the age is below 18, print "Exception occurred: InvalidAgeException: Age is not valid to vote"

If there is any other type of exception, print "An error occurred: " followed by the in-built exception message.

Refer to the sample output for formatting specifications.

### **Sample Test Case**

Input: 20

Output: Eligible to vote

### **Answer**

```
import java.util.Scanner;
class Main {
    static void validate(int age) throws InvalidAgeException {
        if (age < 18) {
            throw new InvalidAgeException("Age is not valid to vote");
        } else {
            System.out.println("Eligible to vote");
        }
    }

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

        try {
            int userAge = scanner.nextInt();

            validate(userAge);
        } catch (InvalidAgeException ex) {
            System.out.println("Exception occurred: " + ex);
        } catch (Exception ex) {
            System.out.println("An error occurred: " + ex);
        } finally {
            scanner.close();
        }
    }
}
```

```
}  
}  
class InvalidAgeException extends Exception {  
    public InvalidAgeException(String str) {  
        super(str);  
    }  
}
```

**Status :** Correct

**Marks : 10/10**