Rajalakshmi Engineering College

Name: Adithya B
Email: 240701018@rajalakshmi.edu.in
Roll no: 240701018
Phone: 9444117405
Branch: REC
Department: CSE - Section 10
Batch: 2028
Degree: B.E - CSE

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

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

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

class AgeValidator {
    void checkage(int age) {
        try {
            if (age < 18) {
                throw new InvalidAgeException("Exception occurred:
InvalidAgeException: Age is not valid to vote");
            } else {
                System.out.println("Eligible to vote");
            }
        } catch (Exception e) {
            System.out.println(e.getMessage());
        }
    }
}
```

```java
class main {
    public static void main(String args[]) {
        Scanner s = new Scanner(System.in);
        try {
            int age = s.nextInt();
            AgeValidator a1 = new AgeValidator();
            a1.checkage(age);
        } catch (InputMismatchException e) {
            System.out.println("An error occurred: " + e);
        }
    }
}
```

Status : Correct   **Marks : 10/10**