Rajalakshmi Engineering College

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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
import java.util.*;

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

class VotingSystem {
public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      try {
         int age = sc.nextInt();
         if (age < 18) {
            throw new InvalidAgeException("Age is not valid to vote");
         }
         System.out.println("Eligible to vote");
      } catch (InvalidAgeException e) {
         System.out.println("Exception occurred: InvalidAgeException: " +
e.getMessage());
      } catch (Exception e) {
         System.out.println("An error occurred: " + e.getClass().getName());
      } finally {
         sc.close();
```

```
        }
      }
    }
```

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