3)Adding Proper Exception Handiling by Custom Exception Class

// Custom exception class

class CustomException extends Exception {

    public CustomException(String message) {

        super(message); // Pass message to Exception superclass

    }

}

public class CustomExceptionExample {

    public static void main(String[] args) {

        int userInput = -5; // Invalid input

        try {

            validateInput(userInput);

        } catch (CustomException e) {

            System.out.println("Custom Exception caught: " + e.getMessage());

        }

        System.out.println("Program continues...");

    }

    private static void validateInput(int input) throws CustomException {

        if (input < 0) {

            throw new CustomException("Input cannot be negative");

        } else {

            System.out.println("Valid input: " + input);

        }

    }

}