```
import java.util.Scanner;
public class quesr{
  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    try {
      int[] numbers = { 10, 20, 30, 40, 50 };
      System.out.print("Enter the index to access: ");
      int index = sc.nextInt();
      int value = numbers[index];
      System.out.println("Value at index " + index + ": " + value);
catch (ArrayIndexOutOfBoundsException e) {
      System.out.println("Error: Invalid index. The index is out of bounds.");
catch (Exception e) {
      System.out.println("Error: Invalid input. Please enter a valid integer index.");
finally {
    }
  }
```