A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A)

(Re-Accredited with 'B' Grade by NAAC)
(Affiliated to Adikavi Nannaya University)
Jagannaickpur, Kakinada.

DEPARTMENT OF COMPUTER SCIENCE

స్త్రీ విద్యాప్రవర్ధతాం

GUEST LECTURE

2020-2021

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A)

JAGANNAICKPUR, KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

2020 - 2021

GUEST LECTURE

By

Smt. E.Jyothi Kiranmayi **M.Tech.,**
Lecturer in Computer Science,
S.V.D.Govt. Degree College(A), Nidadavole.

Date : 03-02-2021

Topic : **Exception Handling**

Organized by

N.NAGA SUBRAHMANYESWARI, LECTURER IN COMPUTER SCIENCE

G.SATYA SUNEETHA, LECTURER IN COMPUTER APPLICATIONS

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

Activity Register 2019-2020

Date	03/02/2021
Conducted through (DRC/JKC/ELF/NCC/NSS/ Departments etc.)	Department of Computer Science
Nature of Activity (Seminar/Workshop/Extn. Lecture etc.,)	Guest Lecture
Title of the Activity	**Exception Handling**
Name of the Department/Committee	Computer Science
Details of Resource Persons (Name , Designation etc.,)	**Smt. E.Jyothi Kiranmayi** **M.Tech.,** **Lecturer in Computer Science,** **S.V.D.Govt. Degree College(W), Nidadavole.**
No.of students participated	42
Brief Report on the activity	To enable the students to identify the significance of Exception Handling in Object Oriented Programming.
Name of the Lecturers who Planned & conducted the activity	N.Naga Subrahmanyeswari, Lecturer in Computer Science G.Satya Suneetha, Lecturer in Computer Applications
Signature of the Dept.In-Charge/ Convener of the Committee	N.N.S.Eswari INCHARGE DEPT OF COMPUTER SCIENCE A.S.D.GOVT.DEGREE COLLEGE (W)(AUTONOMOUS) KAKINADA
Signature of the Principal	H. Suvarchala PRINCIPAL A.S.D.GOVT.DEGREE COLLEGE (W) AUTONOMOUS KAKINADA
Remarks	

A.S.D.GOVT.DEGREE COLLEGE FOR WOMEN (A) KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

INVITATION

స్త్రీ విద్యా ప్రవర్ధతాం

The Department of Computer Science wishes to arrange A Guest Lecture
on
03-02-2021 at 11.00 A.M. through Online mode

Subject: Object Oriented Programming using Java

Topic: Exception Handling

By

Smt. E.Jyothi Kiranmayi M.Tech.,
Lecturer in Computer Science,
S.V.D.Govt. Degree College(W),
Nidadavole.

N.N.S. Eswari
INCHARGE
DEPT OF COMPUTER SCIENCE
A.S.D.GOVT.DEGREE COLLEGE(W)(AUTONOMOUS)
KAKINADA

H. Suvarchala
PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

In-Charge of the Department **Principal**

A.S.D.GOVT.DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

GUEST LECTURE

NAME OF THE GUEST : **Smt. E.Jyothi Kiranmayi** M.Tech.,
Lecturer in Computer Science,
S.V.D.Govt. Degree College(W), Nidadavole.

TOPIC : **Exception Handling**

DATE : **03-02-2021**

TIME : **11.00 AM**

VENUE : NB-3 through Online Mode using Zoom

N.N.S.Eswari
INCHARGE
DEPT OF COMPUTER SCIENCE
KAKINADA

IN-CHARGE OF THE DEPARTMENT

A.S.D.GOVT.DEGREE COLLEGE FOR WOMEN(A), KAKINADA

DEPARTMENTS OF COMPUTER SCIENCE

GUEST LECTURE

TOPIC : Exception Handling

DATE: 03-02-2021 **VENUE: NB-3** **TIME: 11:00 AM**

S.No	Regd. No.	Name of the Students	Class	Signature
1.	1932001	B.Bhargavi	II BSc (MPCS)	B.Bhargavi
2.	1932002	K. Vimala Devi	II BSc (MPCS)	K. Vimala.
3.	1932003	K. Naga Prasanna	II BSc (MPCS)	K. Naga Prasanna
4.	1932004	MD. Reshma Begum	II BSc (MPCS)	MD Reshma Begum
5.	1932005	M. DivyaRoopa	II BSc (MPCS)	M. DivyaRoopa
6.	1932006	M. Vara lakshmi	II BSC (MPCS)	M.Varalakshmi
7.	1932007	R. Satyavani	II BSc (MPCS)	R. Satyavani
8.	1932008	A. Pratyusha	II BSC (MPCS)	A. Pratyusha
9.	1932009	A. Sireesha	II BSc (MPCS)	A. Sireesha
10.	1932010	A. Gayatri	II BSC (MPCS)	A. Gayatri
11.	1932011	B. Komali manikanta	II BSC [MPCS]	B.K.manikanta
12.	1932012	Ch. Durga Ramya	II BSC (MPCS)	ch. D. Ramya.
13.	1932013	D. Mounika	II B.SC (MPCS)	D. Mounika
14.	1932014	G. Praneetha	II B.SC (MPCS)	G. Praneetha
15.	1932015.	G. surekha.	II BSC [MPCS]	G. surekha.
16.	1932016	G. Lakshmi Deepika	II Bsc (MPCS)	G.L. Deepika
17.	1932017	J. I. Mahalakshmi	II BSC [MPCS]	J Mahalakshmi
18.	1932018	K sravani mahalaxmi	II B.SC (MPCS)	K. Sravani
19.	1932019	K. Bhavani	II B.SC (MPCS)	K. Bhavani
20.	1932020	K. Divya Darshini	II BSC (MPCS)	K. Divya

S.No	Regd. No.	Name of the Students	Class	Signature
21.	1932021	K. Veena Pavani	II BSC-MPCS	K. Veena Pavani
22.	1932022	K. Baladeepika	II BSC [MPCS]	K. Baladeepika
23.	1932023	K. Ramya	II-BSC-MPCS	K. Ramya
24.	1932024	O. Kaveri	II-BSC-MPCS	O. Kaveri
25.	1932025	O. Lavanya	II-BSC-MPCS	O. Lavanya
26.	1932026	P. Navya	II BSC-MPCS	P. Navya
27.	1932027	P. Tejaswini	II BSC-MPCS	P. Tejaswini
28.	1932028	S. Divya	II BSC-MPCS	S. Divya
29.	1932029	S. Niharika	II BSC-MPCS	S. Niharika
30.	1932030	T. Sireesha	II. BSC-MPCS	T. Sireesha
31.	1923001	Srujanaanjali	II. B.com-CA	Srujana
32.	1923002	R. Ramya	II B.com CA	R. Ramya
33.	1923003	K. Parimala	II. B.com CA	K. Parimala
34.	1923004	B. Durga Bhaveni	II. B.com - C.A	B. Durga Bhaveni
35.	1923005	G. Aranha Lakshmi	II. B.Com - C.A	G. Aranha Lakshmi
36.	1923006	G. Aparna	II. B.COM - C.A	G. Aparna
37.	1923007	Malleswari	II B.COM - C.A	Malleswari
38.	1923008	K. Bharathi	II. B.com - CA	K. Bharathi
39.	1923009	M. Laya Nupisha	II. B.com - CA	M. Laya
40.	1923010	P. Srinavvika	II. B.COM - C.A	P. Srinavvika
41.	1923011	P. Devi Mounika	II. B.com - C.A	P. D. Mounika
42.	1923012	B. Nookaratnam	II B. (com) - CA	B. Nookaratnam
43.	1923013	B. Sumathi	II. B.Com - C.A	B. Sumathi
44.	1923014	B. Jashma Durga	II. B.com - C.A	B. Jashma
45.	1923015	Ch. Lakshmi Sowjanya	II. B.Com - CA	Ch. L. Sowjanya
46.	1923016	D. Supritha Devi	II. B. com - CA	D. Supritha
47.	1923017	J Sasi Lekha	II B.Com C.A	J. Sasi Lekha
48.	1923018	J. Narmada	II. B.Com. CA	J. Narmada
49.	1923023	N. Ramatulasi	II. B.com C.A	N. R. Tulasi
50.	1923020	K. Tanuja	II. B.COM C.A	K. Tanuja

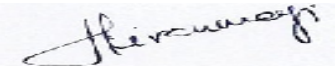
A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN(A)
KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

GUEST LECTURE

A Guest Lecture is conducted for the Students of II B.Sc (M.P.Cs) and II B.Com (C.A.)

Name of the Guest **:** **Smt. E.Jyothi Kiranmayi** **M.Tech.,**
Lecturer in Computer Science,
S.V.D.Govt. Degree College(W),
Nidadavole.

TOPIC	VENUE	DATE	TIME	SIGNATURE OF THE GUEST
Exception Handling	NB-3 (Online Mode)	03-02-2021	11 AM	

Signatures of the Lecturers Attended:

1. 
2. 

Signature of the Principal


Commissionerate of Collegiate Education
Government of Andhra Pradesh

GOVERNMENT OF ANDHRA PRADESH

COMMISSIONERATE OF COLLEGIATE EDUCATION

EXCEPTION HANDLING

OBJECT ORIENTED PROGRAMMING USING JAVA

COMPUTER SCIENCE / APPLICATIONS

E. Jyothi Kiranmayi M.Tech

S.V.D Govt. Degree College (W),
Nidadavole
Email. Id : jkiranmayi1@gmail.com

Exception Handling

Learning Objectives

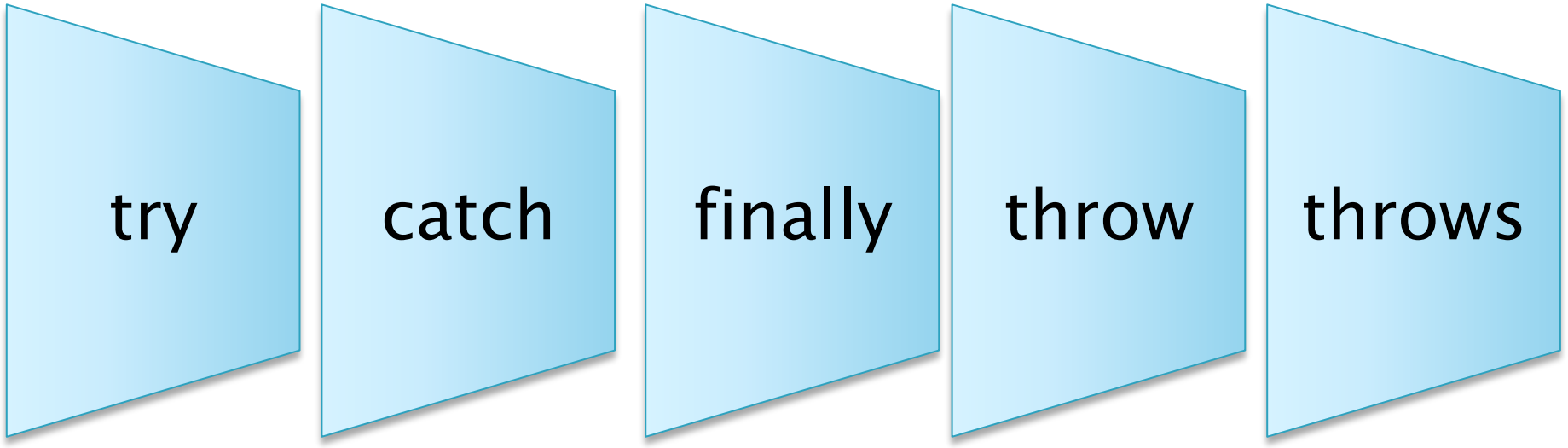
- Exception
- Keywords used in Exception Handling
- Try / catch block
- Finally
- Throw keyword
- Throws keyword

Exceptions

- An exception is a run time error that interrupts the normal flow of a program
- Exception is an unusual behavior/event of a program that occurs during the execution of a program
- Whenever exception occurs Java run time system creates an exception object and throws it to the method that causes exception
- The thrown exception object must be caught and handled properly otherwise Java interpreter will display an error message and terminates the program

Exception Handling Mechanism

- Java's Exception handling mechanism uses five keywords to detect and handle exceptions



Syntax for Simple try/catch Block

```
try {
        //Statement(s) that might cause exception
      }

catch ( Exceptiontype object) {
          // Statement(s) that handle exceptions
      }

finally {
          // Statements to be executed
       }
```

Try block

Catch block

Finally block
(optional)

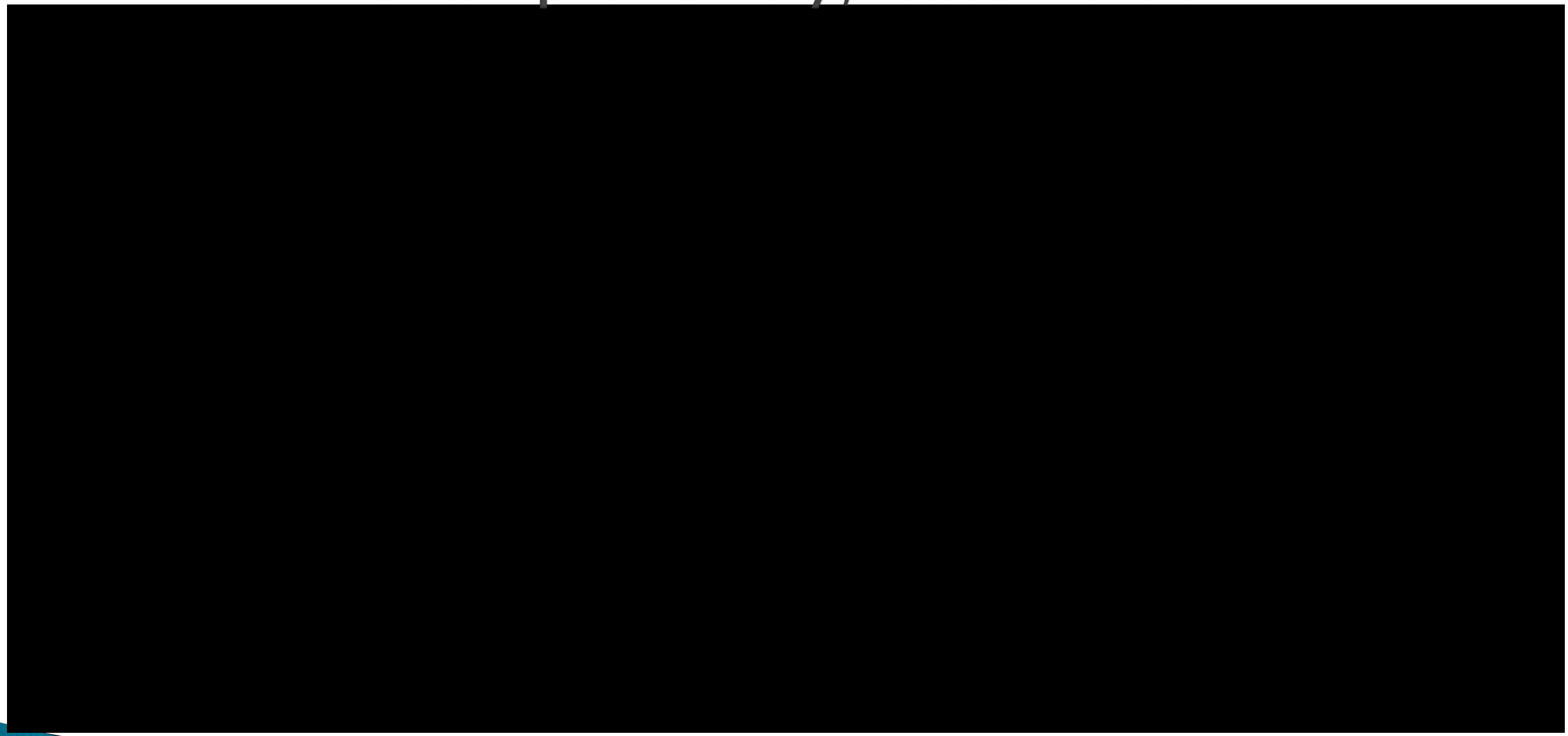
try/catch Blocks

- try block contains the statements that are expected to raise an exception
- catch block contains the statements that handle the exceptions
- catch block always follow try block i.e. catch block doesn’t exist if there is no try block
- try block exist even if there is no catch block

finally Block

- The statements in finally block will get executed only after the execution of try/catch block and before the code that follows try/catch block
- finally block must be associated with try block i.e. finally block cannot be exist without try block
- Finally block executes irrespective of whether exception has occurred or not
- Finally block is used for clean up activities like closing files, closing connections etc.

Example for try/ catch block



throw Keyword

- throw keyword is used to throw an exception explicitly

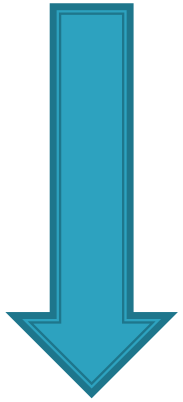
- The general form of throw is

throw *ThrowableInstance*

where, *ThrowableInstance* must be an object of type Throwable or a subclass of Throwable

Example for throw keyword

```
class ThrowDemo  {
        static void testProc() {
                try {
                   throw new NullPointerException("Demo");
                } catch(NullPointerException e) {
            System.out.println("Exception caught inside tesproc");
                  throw e;
                }
        }
public static void main(String args[]) {
        try {
         testProc();
        } catch(NullPointerException e) {
          System.out.println(" Recaught in main: " +e);
        }
    }
  }
```



Output

```
Exception caught inside tesproc
 Recaught in main: java.lang.NullPointerException: Demo
```

throws Keyword

- throws keyword is used to list the exceptions that might thrown by a method

- General form

```
Type method_name(parameter_list) throws exception_list
{
    // body of method
}
```

where exception_list is a comma-separated list of exceptions that a method might throw

Example

```
public void myMethod {
        try {
              //statements that might cause exceptions
           }
         catch(ArithmeticException e) {
              // Exception handling statements
          }
         catch(ArrayIndexOutofBoundsException e) {
           // Exception handling statements
         }
}
```

Example for throws

```
public void myMethod throws ArithmeticException, ArrayIndexOutofBoundsException {
        // statements that might cause exceptions
}
public static void main(String args[]) {
        try {
            myMethod();
           } catch(ArithmeticException e){
                        // Exception handling statements
         } catch(ArrayIndexOutofBoundsException e){
                        // Exception handling statements
         }
}
```

summary

- Java’s exception handling mechanism uses five keywords to handle the exceptions : try, catch, finally, throw, throws
- try block contains the statements that causes exceptions
- catch block contains the statements that handle the exceptions
- finally block is an optional block that follows try /catch block , used to perform clean up activities
- throw is used to throw exceptions explicitly
- throws is used to list the exceptions thrown by the method

References

Text Books

- Herbert Schildt, Java : The Complete Reference, 7th Edition, TMH, 2006
- E. Balaguru Swamy, Programming with Java, A Primer, 3e, Tata McGraw Hill

Web Links

- https://nptel.ac.in/courses/106/105/106105191/ - Lectures 23 -25

Thank you