

# Exception Handling



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# Exceptions

- ✓ Condition that is caused by Run-Time error
- ✓ Java Interpreter encounters Run-Time errors
- ✓ Java Interpreter creates and throws Exception Object
- ✓ User must catch and deal Exception Object

# Exception Handling

- ✓ If it is caught and handled properly, Java Interpreter displays error message and terminate the program
- ✓ If we want to continue the execution of the remaining code, we should catch and handle exception object thrown by the error condition and then display the appropriate message for taking corrective actions
- ✓ This is known as Exception Handling

# Exception Handling

- ✓ Hit the Exception
- ✓ Throw the Exception
- ✓ Catch the Exception
- ✓ Handle the Exception

# Common Java Exceptions

<b>ArithmeticException</b>	<b>Caused by Math errors such as division by zero</b>
ArrayIndexOutOfBoundsException	Caused by bad array indexes
ArrayStoreException	Caused when storing wrong type of data
FileNotFoundException	Caused when accessing nonexistence file
IOException	Caused by I/O failures such as inability to read from a file
NullPointerException	Caused when referencing a null object

# Common Java Exceptions

<b>NumberFormatException</b>	<b>Caused when a conversion between strings and a number fails</b>
OutOfMemoryException	Caused when there is not enough memory to allocate a new object
SecurityException	Caused when applet tries to perform an action not allowed by the browser's security settings
StackOverflowException	Caused when system runs out of stack
StringIndexOutOfBoundsException	Caused when a program attempts to access a non-existent character position in a string

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# References

- ✓ Programming with Java – A Primer - E. Balagurusamy, 3rd Edition, TMH

Thank You