

### Contoh 1 Handling ArithmeticExceptions dan InputMismatchExceptions.

```
1  import java.util.InputMismatchException;
2  import java.util.Scanner;
3
4  public class DivideByZeroWithExceptionHandling {
5
6      //mendemonstrasikan pengecualian ketika terjadi pembagian dengan nol
7      public static int quotient( int numerator, int denominator ) throws ArithmeticException
8      {
9          return numerator / denominator;
10     } // end method quotient
11
12     public static void main( String[] args )
13     {
14         Scanner scanner = new Scanner( System.in );
15         boolean continueLoop = true;
16         do
17         {
18             try
19             {
20                 System.out.print( "Ketikkan nilangan bulat yang akan dibagi: " );
21                 int numerator = scanner.nextInt();
22                 System.out.print( "Ketikkan bilangan bulat pembagi: " );
23                 int denominator = scanner.nextInt();
24
25                 int result = quotient( numerator, denominator );
26                 System.out.printf( "\nHasil bagi: %d / %d = %d\n", numerator, denominator, result );
27                 continueLoop = false;
28             } // end try
29             catch ( InputMismatchException inputMismatchException )
30             {
31                 System.err.printf( "\nException: %s\n", inputMismatchException );
32                 scanner.nextLine();
33                 System.out.println("Anda harus mengetikkan bilangan bulat\n");
34             } // end catch
35
36             catch ( ArithmeticException arithmeticException )
37             {
38                 System.err.printf( "\nException: %s\n", arithmeticException );
39                 System.out.println("Nol adalah pembangi yang tidak valid. Silakan ulangi lagi\n");
40             } // end catch
41         } while ( continueLoop );
42     } // end main
43 } // end class DivideByZeroWithExceptionHandling
44
```

Ketikkan nilangan bulat yang akan dibagi: 5

Ketikkan bilangan bulat pembagi: 0

Exception: [java.lang.ArithmeticException: / by zero](#)

Nol adalah pembangi yang tidak valid. Silakan ulangi lagi

Ketikkan nilangan bulat yang akan dibagi: 5

Ketikkan bilangan bulat pembagi: 2.5

Exception: [java.util.InputMismatchException](#)

Anda harus mengetikkan bilangan bulat

Ketikkan nilangan bulat yang akan dibagi: 5

Ketikkan bilangan bulat pembagi: 2

Hasil bagi: 5 / 2 = 2

## Contoh 2

```
1 public class UsingExceptions {
2
3     public static void main(String[] args) {
4         try
5         {
6             throwException();
7         } // end try
8         catch ( Exception exception )
9         {
10            System.err.println( "Exception handled in main" );
11        } // end catch
12
13        doesNotThrowException();
14    } // end main
15
16    // demonstrate try...catch...finally
17    public static void throwException() throws Exception
18    {
19        try
20        {
21            System.out.println( "Method throwException" );
22            throw new Exception();
23        } // end try
24        catch ( Exception exception )
25        {
26            System.err.println("Exception handled in method throwException" );
27            throw exception;
28        } // end catch
29
30        finally
31        {
32            System.err.println( "Finally executed in throwException" );
33        } // end finally
34    } // end method throwException
35
36    public static void doesNotThrowException()
37    {
38        try
39        {
40            System.out.println( "Method doesNotThrowException" );
41        } // end try
42        catch ( Exception exception )
43        {
44            System.err.println( exception );
45        } // end catch
46        finally
47        {
48            System.err.println("Finally executed in doesNotThrowException" );
49        } // end finally
50        System.out.println( "End of method doesNotThrowException" );
51    } // end method doesNotThrowException
52 } // end class UsingExceptions
53
```

```
Problems @ Javadoc Declaration Console ×
<terminated> UsingExceptions [Java Application] C:\Users\User\p
Method throwException
Exception handled in method throwException
Finally executed in throwException
Exception handled in main
Finally executed in doesNotThrowException
Method doesNotThrowException
End of method doesNotThrowException
```

### Contoh 3

```
1 public class UsingExceptions2 {
2     public static void main(String[] args) {
3         try
4         {
5             method1();
6         } // end try
7         catch ( Exception exception )
8         {
9             System.err.printf( "%s\n\n",exception.getMessage());
10            exception.printStackTrace();
11
12            StackTraceElement[] traceElements = exception.getStackTrace();
13            System.out.println( "\nStack trace from getStackTrace:" );
14            System.out.println( "Class\t\tFile\t\t\tLine\tMethod" );
15
16            for ( StackTraceElement element : traceElements )
17            {
18                System.out.printf( "%s\t", element.getClassName());
19                System.out.printf( "%s\t", element.getFileName());
20                System.out.printf( "%s\t", element.getLineNumber());
21                System.out.printf( "%s\t", element.getMethodName());
22            } // end for
23        } // end catch
24    } // end main
25
26    // memanggil method2; melempar Exception kembali ke main
27    public static void method1() throws Exception
28    {
29        method2();
30    } // end method method1
31
32    // memanggil method3; melempar Exception kembali ke method1
33    public static void method2() throws Exception
34    {
35        method3();
36    } // end method method2
37
38    // mengembalikan Exception ke metode2
39    public static void method3() throws Exception
40    {
41        throw new Exception( "Exception thrown in method3" );
42    } // end method method3
43 } // end class UsingExceptions
44
```

Exception thrown in method3

```
java.lang.Exception: Exception thrown in method3
    at UsingExceptions.method3(UsingExceptions.java:49)
    at UsingExceptions.method2(UsingExceptions.java:43)
    at UsingExceptions.method1(UsingExceptions.java:37)
    at UsingExceptions.main(UsingExceptions.java:10)
```

Stack trace from getStackTrace:

Class	File	Line	Method
UsingExceptions	UsingExceptions.java	49	method3
UsingExceptions	UsingExceptions.java	43	method2
UsingExceptions	UsingExceptions.java	37	method1
UsingExceptions	UsingExceptions.java	10	main



Contoh 4:

```
1 public class UsingChainedExceptions {
2     public static void main(String[] args) {
3         try
4         {
5             method1();
6         } // end try
7         catch ( Exception exception )
8         {
9             exception.printStackTrace();
10        } // end catch
11    } // end main
12
13    // memanggil method2; melempar exceptions kembali ke main
14    public static void method1() throws Exception
15    {
16        try
17        {
18            method2();
19        } // end try
20        catch ( Exception exception ) // exception dilempar dari method2
21        {
22            throw new Exception( "Exception thrown in method1", exception );
23        } // end catch
24    } // end method method1
25
26    // memanggil method3; melempar exceptions kembali ke method1
27    public static void method2() throws Exception
28    {
29        try
30        {
31            method3(); // call method3
32        } // end try
33        catch ( Exception exception ) // exception dilempar dari method3
34        {
35            throw new Exception( "Exception thrown in method2", exception );
36        } // end catch
37    } // end method method2
38
39    // melempar Exception kembali ke method2
40    public static void method3() throws Exception
41    {
42        throw new Exception( "Exception thrown in method3" );
43    } // end method method3
44 } // end class UsingChainedExceptions
```

Problems Javadoc Declaration Console ×

<terminated> UsingChainedExceptions [Java Application] C:\Users\User\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64.jdk\bin\java.exe

[java.lang.Exception](#): Exception thrown in method1  
at ExceptionHandling/exphd1.UsingChainedExceptions.method1(UsingChainedExceptions.java:25)  
at ExceptionHandling/exphd1.UsingChainedExceptions.main(UsingChainedExceptions.java:8)

Caused by: [java.lang.Exception](#): Exception thrown in method2  
at ExceptionHandling/exphd1.UsingChainedExceptions.method2(UsingChainedExceptions.java:38)  
at ExceptionHandling/exphd1.UsingChainedExceptions.method1(UsingChainedExceptions.java:21)  
... 1 more

Caused by: [java.lang.Exception](#): Exception thrown in method3  
at ExceptionHandling/exphd1.UsingChainedExceptions.method3(UsingChainedExceptions.java:45)  
at ExceptionHandling/exphd1.UsingChainedExceptions.method2(UsingChainedExceptions.java:34)  
... 2 more