

Percobaan1

```
public class Exception{  
    public static void main(String[] args){  
        int a[] = new int[5];  
        try  
        {  
            a[5] = 100;  
        }  
        catch(Exception e)  
        {  
            System.out.println("Terjadi pelanggaran memory");  
        }  
    }  
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-X  
XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.P  
raktikum_2.MyException'  
Terjadi pelanggaran memory  
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan2

```
public class Exception2 {  
    public static void main(String[] args) {  
        int i=0;  
        String greetings[]={  
            "Hello World!",  
            "No, I mean it!",  
            "HELLO WORLD!"  
        };  
        while(i<4)  
        {  
            try  
            {  
                System.out.println(greetings[i]);  
                i++;  
            }  
            catch(ArrayIndexOutOfBoundsException e)  
            {  
                System.out.println("Resetting index value");  
                i=0;  
            }  
        }  
    }  
}
```

Output:

```
HELLO WORLD!  
Resetting index value  
Hello World!  
No,I mean it!  
HELLO WORLD!  
Resetting index value  
Hello World!  
No,I mean it!  
HELLO WORLD!
```

```
PS D:\Coding\Java\OOP\Myfirstproject> d:; cd 'd:\Coding\Java\OOP\Myfirstproject'; & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.Praktikum_2.MyException2'  
Hello World!  
No,I mean it!  
HELLO WORLD!  
Resetting index value  
PS D:\Coding\Java\OOP\Myfirstproject> []
```

Percobaan3

```
public class Exception3 {  
  
    public static void main(String[] args) {  
        int bil=10;  
        try  
        {  
            System.out.println(bil/0);  
        }  
        catch(Exception e)  
        {  
            System.out.println("Ini menghandle error yang terjadi");  
        }  
    }  
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-X  
X:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.P  
raktikum_2.MyException3'  
Ini menghandle error yang terjadi  
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan4

```
public class CobaException4 {  
    public static void main(String[] args) {  
        int bil=10;  
        String b[]={ "a", "b", "c" };  
        try  
        {  
            System.out.println(bil/0);  
  
            System.out.println(b[3]);  
        }  
        catch(ArithmeticException e)  
        {  
            System.out.println("Terjadi Aritmatika error");  
        }  
        catch(ArrayIndexOutOfBoundsException e)  
        {  
            System.out.println("Melebihi jumlah array");  
        }  
        catch(Exception e)  
        {  
            System.out.println("Ini menghandle error yang terjadi");  
        }  
    }  
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-X  
X:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.P  
raktikum_2.MyException4'  
Terjadi Aritmatika error  
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan5

```
public class Exception5 {  
  
    public static void main(String[] args) {  
        int bil=10;  
        try  
        {  
            System.out.println(bil/0);  
        }  
        catch(ArithmetricException e)  
        {  
            System.out.println("Pesan error: ");  
            System.out.println(e.getMessage());  
            System.out.println("Info stack erase");  
            e.printStackTrace();  
            e.printStackTrace(System.out);  
        }  
        catch(Exception e)  
        {  
            System.out.println("Ini menghandle error yang terjadi");  
        }  
    }  
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> d;; cd 'd:\Coding\Java\OOP\Myfirstproject'; & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.Praktikum_2.MyException5'  
Pesan error:  
/ by zero  
Info stack erase  
java.lang.ArithmetricException: / by zero  
    at Nusput.Praktikum_2.MyException5.main(MyException5.java:10)  
java.lang.ArithmetricException: / by zero  
    at Nusput.Praktikum_2.MyException5.main(MyException5.java:10)  
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan6

```
public class ThrowExample {  
  
    static void demo()  
    {  
        NullPointerException t;  
        t=new NullPointerException("Coba Throw");  
        throw t;  
  
        // Baris ini tidak lagi dikerjakan;  
        System.out.println("Ini tidak lagi dicetak");  
    }  
  
    public static void main(String[] args) {  
        try  
        {  
            demo();  
            System.out.println("Selesai");  
        }  
        catch(NullPointerException e)  
        {  
            System.out.println("Ada pesan error: "+e);  
        }  
    }  
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' 'X:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusp raktikum_2.ThrowExample'  
Ada pesan error: java.lang.NullPointerException: Coba Throw  
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan7

```
public class ThrowExample2 {  
  
    public static void main(String[] args) {  
        try  
        {  
            throw new Exception("Here's my Exception");  
        }  
        catch(Exception e)  
        {  
            System.out.println("Caught Exception");  
            System.out.println("e.getMessage(): "+e.getMessage());  
            System.out.println("e.toString(): "+e.toString());  
            System.out.println("e.printStackTrace():");  
            e.printStackTrace();  
        }  
    }  
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> d;; cd 'd:\Coding\Java\OOP\Myfirstproject'; & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.Praktikum_2.ThrowExample2'  
Caught Exception  
e.getMessage():Here's my Exception  
e.toString():java.lang.Exception: Here's my Exception  
e.printStackTrace():  
java.lang.Exception: Here's my Exception  
    at Nusput.Praktikum_2.ThrowExample2.main(ThrowExample2.java:9)  
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan8

```
import java.io.*;

public class Test3 {
    public void methodA(){
        System.out.println("Method A");
    }
    public void methodB() throws IOException
    {
        System.out.println(20/0);
        System.out.println("Method B");
    }
}
```

```
class Utama
{
    public static void main(String[] args)
    {
        Test3 o=new Test3();
        o.methodA();
        try
        {
            o.methodB();
        }
        catch(Exception e)
        {
            System.out.println("Error di Method B");
        }
        finally
        {
            System.out.println("Ini selalu dicetak");
        }
    }
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' 'X:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusputraktikum_2.Utama'
Method A
Exception in thread "main" java.lang.ArithmetricException: / by zero
    at Nusputraktikum_2.Test3.methodB(Test3.java:11)
    at Nusputraktikum_2.Utama.main(Utama.java:20)
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan9

```
class Propagate {  
  
    public static void main(String[] args)  
    {  
        try  
        {  
            System.out.println(reverse("This is a string"));  
        }  
        catch(Exception e)  
        {  
            System.out.println("The String was blank");  
        }  
        finally  
        {  
            System.out.println("All done");  
        }  
    }  
  
    public static String reverse(String s) throws Exception  
    {  
        if(s.length()==0)  
    }
```

```
{  
    throw new Exception();  
}  
String reverseStr = "";  
for(int i=s.length()-1 ; i>=0 ; --i){  
    reverseStr+=s.charAt(i);  
}  
return reverseStr;  
}  
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> d:; cd 'd:\Coding\Java\OOP\Myfirstproject'; & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.Praktikum_2.Propagate'  
gnirts a si sihT  
All done  
PS D:\Coding\Java\OOP\Myfirstproject>
```

```
PS D:\Coding\Java\OOP\Myfirstproject> d:; cd 'd:\Coding\Java\OOP\Myfirstproject'; & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.Praktikum_2.Propagate'  
The String was blank  
All done  
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan10

```
class RandomAccessRevisi
{
    public static void main(String[] args) {

        String bookList[]{"Satu","Dua","Tiga"};
        int yearList[]{1920,1230,1940};
        try
        {
            RandomAccessFile books = new RandomAccessFile
("books.txt","rw");

            for(int i=0;i<3;i++)
            {
                books.writeUTF(bookList[i]);
                books.writeInt(yearList[i]);
            }
            books.seek(0);
            System.out.println(books.readUTF()+" "+books.readInt());
            System.out.println(books.readUTF()+" "+books.readInt());
            books.close();

        }
        catch(IOException e)
        {
            System.out.println("Indeks melebihi batas");
        }
        System.out.println("test");
    }
}
```

Output:



The screenshot shows a terminal window with the following content:

```
J Pegawai.java
≡ books.txt
① README.md
> OUTLINE
> TIMELINE
> MYSQL
> JAVA PROJECTS

PS D:\Coding\Java\OOP\Myfirstproject> d;; cd 'd:\Coding\Java\OOP\Myfirstproject'; & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.Praktikum_2.RandomAccessRevisi'
Satu 1920
Dua 1230
test
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan11

```
class RangeErrorException extends Throwable
{
    public RangeErrorException(String s)
    {
        super(s);
    }
}
```

```
public static void main(String[] args)
{
    int position=1;
    try
    {
        if(position>0)
        {
            throw new RangeErrorException("Position " +position);
        }
    }
    catch(RangeErrorException e)
    {
        System.out.println("Range error: " +e.getMessage());
    }
    System.out.println("This is the last program.");
}
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '->
X:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.P
raktikum_2.RangeErrorException'
Range error: Position 1
This is the last program.
PS D:\Coding\Java\OOP\Myfirstproject>
```

Percobaan12

```
class MyException extends Exception{  
    private String Teks;  
    MyException(String s)  
    {  
        Teks="Exception generated by: "+s;  
        System.out.println(Teks);  
    }  
}  
  
class Eksepsi  
{  
    static void tampil(String s) throws Exception  
    {  
        System.out.println("Tampil");  
        if(s.equals("amir"))  
        {  
            throw new MyException(s);  
        }  
        System.out.println("OK!");  
    }  
  
    public static void main(String[] args) throws Exception  
    {  
        try  
        {  
            tampil("ali");  
            tampil("amir");  
        }  
        catch(MyException ex)  
        {  
            System.out.println("Tangkap:"+ex);  
        }  
    }  
}
```

Output:

```
PS D:\Coding\Java\OOP\Myfirstproject> & 'C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe' '-X  
X:+ShowCodeDetailsInExceptionMessages' '-cp' 'D:\Coding\Java\OOP\Myfirstproject\bin' 'Nusput.P  
raktikum_2.Eksepsi'  
Tampil  
OK!  
Tampil  
Exception generated by: amir  
Exception in thread "main" Nusput.Praktikum_2.MyException12  
    at Nusput.Praktikum_2.Eksepsi.tampil(MyException12.java:19)  
    at Nusput.Praktikum_2.Eksepsi.main(MyException12.java:27)  
PS D:\Coding\Java\OOP\Myfirstproject>
```