# Tugas
# Pemrograman Berorientasi Objek

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1.Contoh Eksepsi

```
try and catch #1
Eksepsi : java.lang.ArrayIndexOutOfBoundsException: Index 3 out of bounds for
 length 2
Terima kasih telah menjalankan program
try and catch #2
Eksepsi f : java.lang.ArithmeticException: / by zero
```

```java
package Eksepsi;

import java.io.File;
import java.io.FileReader;

public class contohEksepsi {
    public static void main(String[] args) {
        System.out.println("\n");
        // checked
        File file = new File("E://file.txt");
        // FileReader fr = new FileReader(file);

        // unchecked
        int num[] = { 1, 2, 3, 4 };
        // System.out.println(num[5]);

        // try & catch
        System.out.println("try and catch #1");
        try {
            int a[] = new int[2];
            System.out.println("Akses elemen ke-3 : " + a[3]);
        } catch (ArrayIndexOutOfBoundsException e) {
            System.out.println("Eksepsi : " + e);
        } finally {
            System.out.println("Terima kasih telah menjalankan program");
        }

        System.out.println("try and catch #2");
        try {
            int b = 1 / 0;
            System.out.println(b);
        } catch (NullPointerException e) {
            System.out.println("Eksepsi e : " + e);
        } catch (ArithmeticException f) {
            System.out.println("Eksepsi f : " + f);
        } catch (ArrayIndexOutOfBoundsException g) {
            System.out.println("Eksepsi g : " + g);
        } catch (Exception h) {
            System.out.println("Eksepsi h " + h);
```

```
        }

        //
        System.out.println("\n");
    }
}
```

2. Membuat Eksepsi Sendiri

```
Saldo akhir akun ke 0 adalah Rp. 2000000.0
Saldo setelah diambil 1jt akun ke 0 adalah Rp. 1000000.0
Saldo akhir akun ke 1 adalah Rp. 0.0
Eksepsi akun ke 1 adalah myException.OverdriveException: Dana anda tidak menc
ukupi
Saldo setelah diambil 1jt akun ke 1 adalah Rp. 0.0
```

OverrideException.java

```
package myException;

public class OverdriveException extends Exception {
    // eksepsi sendiri
    private double deficit = 0;

    public OverdriveException(String msg, double deficit) {
        super(msg);
        this.deficit = deficit;
    }

    public double getDeficit() {
        return deficit;
    }
}
```

Account.java

```
package myException;

public class Account {
    protected double balance;

    protected Account(double initBalance) {
        balance = initBalance;
```

```
    }

    public double getBalance() {
        return balance;
    }

    public void deposit(double amt) {
        balance += amt;
    }

    public void withdraw(double amt) throws OverdriveException {
        if (amt <= balance) {
            balance -= amt;
        } else {
            throw new OverdriveException("Dana anda tidak mencukupi", amt -
balance);
        }
    }

    public static void main(String[] args) {
        System.out.println("\n");
        int i;
        Account[] acc = new Account[100];
        acc[0] = new Account(2000000);
        acc[1] = new Account(0);

        for (i = 0; i < 2; i++) {
            double d = acc[i].getBalance();
            System.out.println("Saldo akhir akun ke " + i + " adalah Rp. " +
d);
            try {
                acc[i].withdraw(1000000);
            } catch (OverdriveException e) {
                System.out.println("Eksepsi akun ke " + i + " adalah " + e);
            } finally {
                double b = acc[i].getBalance();
                System.out.println("Saldo setelah diambil 1jt akun ke " + i
+ " adalah Rp. " + b);
            }
        }
        System.out.println("\n");
    }
}
```