ACTIVITY PERTEMUAN 1

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MATA PRAKTIKUM : RPL 2

Class adalah blueprint atau cetakan untuk membuat objek. Di dalam class, kita mendefinisikan data (disebut atribut) dan perilaku (disebut method) yang dimiliki oleh objek.

Komponen Utama Class

1. **Nama Class**
   Ini adalah identitas dari class. Biasanya ditulis dengan huruf kapital di awal, misalnya Mahasiswa.

2. **Atribut (Field)**
   Variabel yang menyimpan data milik objek. Contohnya: nama, umur, nilai.

3. **Method (Fungsi)**
   Fungsi yang mendefinisikan aksi atau perilaku objek. Misalnya: tampilkanInfo(), hitungNilai().

4. **Constructor**
   Method khusus yang dipanggil saat objek dibuat. Digunakan untuk menginisialisasi atribut.

5. **Access Modifier**
   Kata kunci seperti public, private, dan protected yang menentukan siapa yang boleh mengakses bagian dari class.

```java
public class Mahasiswa {

    // Atribut

    private String nama;

    private int umur;
```

```java
    // Constructor

    public Mahasiswa(String nama, int umur) {

        this.nama = nama;

        this.umur = umur;

    }


    // Method

    public void tampilkanInfo() {

        System.out.println("Nama: " + nama);

        System.out.println("Umur: " + umur + " tahun");

    }


    // Getter

    public String getNama() {

        return nama;

    }


    // Setter

    public void setNama(String nama) {

        this.nama = nama;

    }

}
```
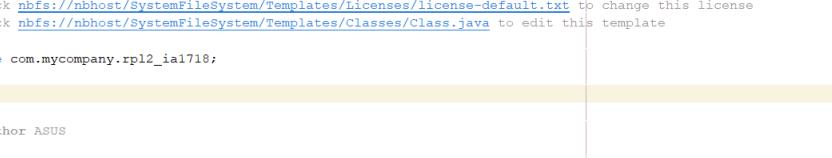
```java
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 */

package com.mycompany.rpl2_ia1718;

/**
 *
 * @author ASUS
 */
public class Rpl2_ia1718 {

    public static void main(String[] args) {
        User user =new User();
        user.login();
        user.logout();

        Buyer buyer =new Buyer();
        buyer.login();
        buyer.logout();

        Seller seller = new Seller();
        seller.addproduct("nasi goreng");

        Admin admin =new Admin();
        admin.login();
        admin.logout();
        admin.manageUser();

    }
}
```

```java
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.mycompany.rpl2_ia1718;

/**
 *
 * @author ASUS
 */
public class User {
    String nama;
    String email;
    String npm;
    public void login(){
        System.out.println("User melakukan login");
    }
    public void logout(){
        System.out.println("User melakukan logout");
    }
}
```

Buyer.java

```java
/*
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 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.mycompany.rpl2_ia1718;

/**
 *
 * @author ASUS
 */
public class Buyer extends User{

    @Override
    public void login(){
        System.out.println("Buyer melakukan login");
    }
    @Override
    public void logout(){
        System.out.println("Buyer melakukan logout");
    }
}
```

Seller.java

```java
/*
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 */
package com.mycompany.rpl2_ia1718;

/**
 *
 * @author ASUS
 */
public class Seller extends User{
    private String product;

    public void addproduct(String productName){
        System.out.println("Seller menggunakan produk : " + productName);
        this.product = productName;
    }

}
```

Admin.java

```java
/*
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 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.mycompany.rpl2_ia1718;

/**
 *
 * @author ASUS
 */
public class Admin extends User{

    public void login(){
        System.out.println("Admin melakukan login");
    }
    public void logout(){
        System.out.println("Admin melakukan logout");
    }
    public void manageUser(){
        System.out.println("Admin mengelola user");
    }


}
```

```
cd C:\Users\ASUS\Documents\NetBeansProjects\rpl2_ia1718; "JAVA_HOME=C:\\Program Files\\Java\\jdk-23" cmd /c "\"C:\\Program Files\\NetBeans-2
Scanning for projects...

---------------------< com.mycompany:rpl2_ia1718 >---------------------
Building rpl2_ia1718 1.0-SNAPSHOT
    from pom.xml
--------------------------------[ jar ]---------------------------------

--- resources:3.3.1:resources (default-resources) @ rpl2_ia1718 ---
skip non existing resourceDirectory C:\Users\ASUS\Documents\NetBeansProjects\rpl2_ia1718\src\main\resources

--- compiler:3.11.0:compile (default-compile) @ rpl2_ia1718 ---
Changes detected - recompiling the module! :source
Compiling 5 source files with javac [debug target 23] to target\classes

--- exec:3.1.0:exec (default-cli) @ rpl2_ia1718 ---
User melakukan login
User melakukan logout
Buyer melakukan login
Buyer melakukan logout
Seller menggunakan produk : nasi goreng
Admin melakukan login
Admin melakukan logout
Admin mengelola user
------------------------------------------------------------------------
BUILD SUCCESS
------------------------------------------------------------------------
Total time:  1.497 s
Finished at: 2025-10-25T14:46:28+07:00
------------------------------------------------------------------------
```