

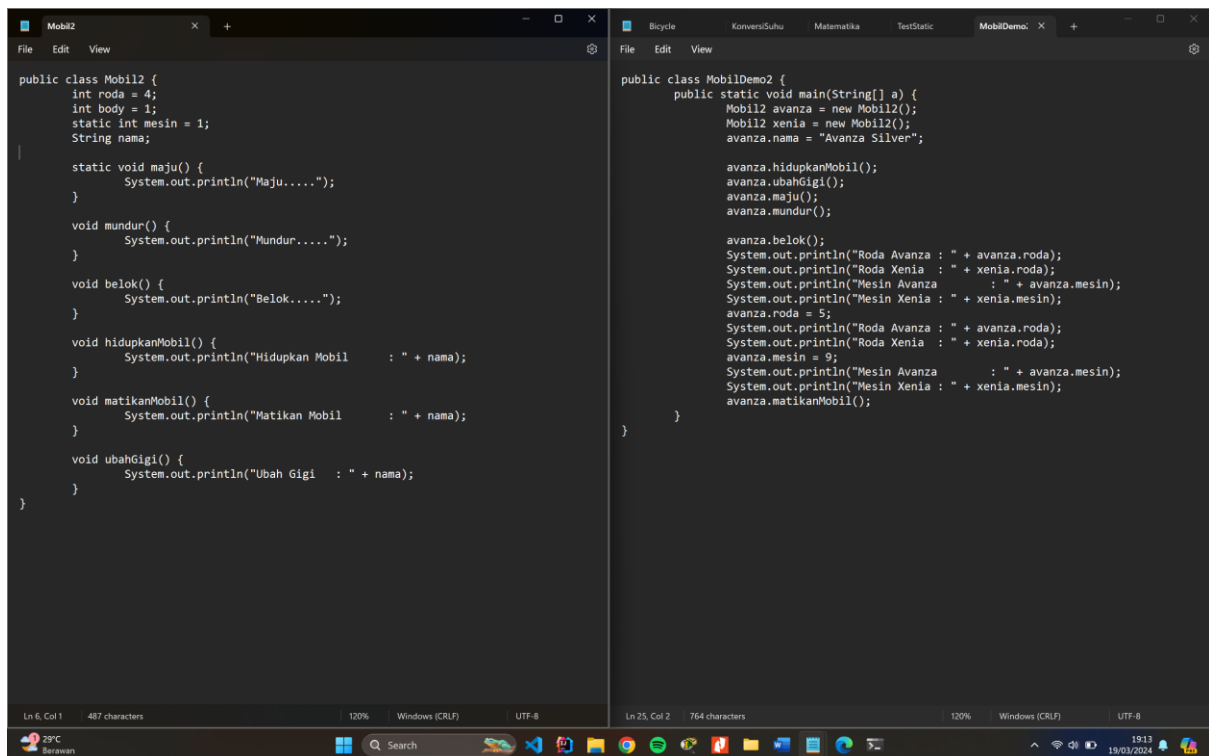
Nama : Restu Lestari Mulianingrum

NIM : A11.2022.14668

Kelompok : A11.4415

PRAKTIKUM 2

Latihan 1



The screenshot shows two IDE windows side-by-side. The left window, titled 'Mobil2', contains the following Java code:

```
public class Mobil2 {
    int roda = 4;
    int body = 1;
    static int mesin = 1;
    String nama;

    static void maju() {
        System.out.println("Maju.....");
    }

    void mundur() {
        System.out.println("Mundur.....");
    }

    void belok() {
        System.out.println("Belok.....");
    }

    void hidupkanMobil() {
        System.out.println("Hidupkan Mobil : " + nama);
    }

    void matikanMobil() {
        System.out.println("Matikan Mobil : " + nama);
    }

    void ubahGigi() {
        System.out.println("Ubah Gigi : " + nama);
    }
}
```

The right window, titled 'MobilDemo2', contains the following Java code:

```
public class MobilDemo2 {
    public static void main(String[] a) {
        Mobil2 avanza = new Mobil2();
        Mobil2 xenia = new Mobil2();
        avanza.nama = "Avanza Silver";

        avanza.hidupkanMobil();
        avanza.ubahGigi();
        avanza.maju();
        avanza.mundur();

        avanza.belok();
        System.out.println("Roda Avanza : " + avanza.roda);
        System.out.println("Roda Xenia : " + xenia.roda);
        System.out.println("Mesin Avanza : " + avanza.mesin);
        System.out.println("Mesin Xenia : " + xenia.mesin);
        avanza.roda = 5;
        System.out.println("Roda Avanza : " + avanza.roda);
        System.out.println("Roda Xenia : " + xenia.roda);
        avanza.mesin = 9;
        System.out.println("Mesin Avanza : " + avanza.mesin);
        System.out.println("Mesin Xenia : " + xenia.mesin);
        avanza.matikanMobil();
    }
}
```

Code Mobil2.java : Kembangkan Class Mobil, ubah nama menjadi Mobil2

```
public class Mobil2 {

    int roda = 4;

    int body = 1;

    static int mesin = 1;

    String nama;


    static void maju() {

        System.out.println("Maju.....");

    }

}
```

```

void mundur() {
    System.out.println("Mundur.....");
}

void belok() {
    System.out.println("Belok.....");
}

void hidupkanMobil() {
    System.out.println("Hidupkan Mobil : " + nama);
}

void matikanMobil() {
    System.out.println("Matikan Mobil : " + nama);
}

void ubahGigi() {
    System.out.println("Ubah Gigi : " + nama);
}
}

```

Code MobilDemo2.java : Panggil method-method diatas dari MobilDemo2

```

public class MobilDemo2 {
    public static void main(String[] a) {
        Mobil2 avanza = new Mobil2();
        Mobil2 xenia = new Mobil2();
        avanza.nama = "Avanza Silver";

        avanza.hidupkanMobil();
        avanza.ubahGigi();
        avanza.maju();
        avanza.mundur();

        avanza.belok();
        System.out.println("Roda Avanza : " + avanza.roda);
        System.out.println("Roda Xenia : " + xenia.roda);
    }
}

```

```

        System.out.println("Mesin Avanza      : " + avanza.mesin);
        System.out.println("Mesin Xenia      : " + xenia.mesin);
        avanza.roda = 5;
        System.out.println("Roda Avanza      : " + avanza.roda);
        System.out.println("Roda Xenia      : " + xenia.roda);
        avanza.mesin = 9;
        System.out.println("Mesin Avanza      : " + avanza.mesin);
        System.out.println("Mesin Xenia      : " + xenia.mesin);
        avanza.matikanMobil();
    }
}

```

Output:

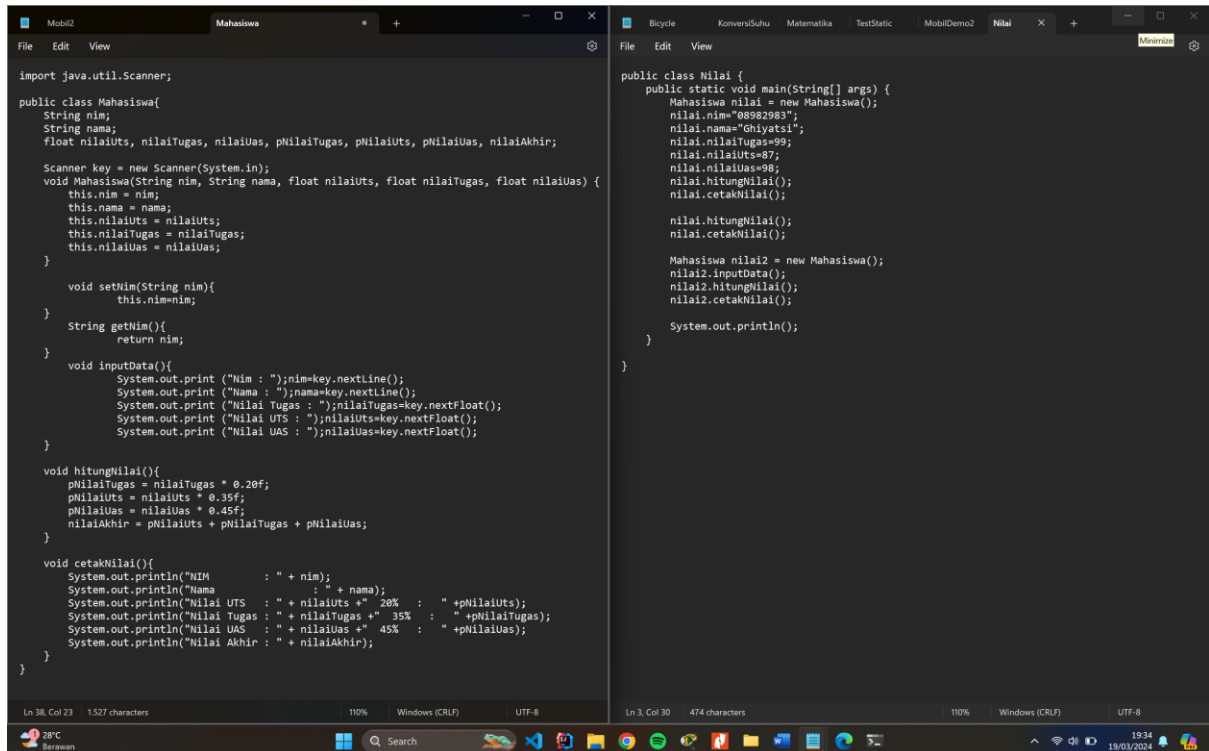
```

Node.js command prompt
D:\Pemrograman Berorientasi Objek\tugas\PRAKTIKUM_2_PBO>javac Mobil2.java
D:\Pemrograman Berorientasi Objek\tugas\PRAKTIKUM_2_PBO>javac MobilDemo2.java
D:\Pemrograman Berorientasi Objek\tugas\PRAKTIKUM_2_PBO>java MobilDemo2
Hidupkan Mobil : Avanza Silver
Ubah Gigi Mobil : Avanza Silver
Maju...
Mundur...
Belok...
Roda Avanza      : 4
Roda Xenia       : 4
Mesin Avanza     : 1
Mesin Xenia      : 1
Roda Avanza      : 5
Roda Xenia       : 4
Mesin Avanza     : 9
Mesin Xenia      : 9
Mesin Avanza     : 9
Mesin Xenia      : 9
Matikan Mobil    : Avanza Silver
D:\Pemrograman Berorientasi Objek\tugas\PRAKTIKUM_2_PBO>

```

Latihan 2

Program untuk menghitung nilai



Code 1 : Class Mahasiswa (Mahasiswa.java)

```
import java.util.Scanner;
```

```
public class Mahasiswa{
```

```
    String nim;
```

```
    String nama;
```

```
    float nilaiUts, nilaiTugas, nilaiUas, pNilaiTugas, pNilaiUts, pNilaiUas, nilaiAkhir;
```

```
    Scanner key = new Scanner(System.in);
```

```
    void Mahasiswa(String nim, String nama, float nilaiUts, float nilaiTugas, float nilaiUas) {
```

```
        this.nim = nim;
```

```
        this.nama = nama;
```

```
        this.nilaiUts = nilaiUts;
```

```
        this.nilaiTugas = nilaiTugas;
```

```
        this.nilaiUas = nilaiUas;
```

```
    }
```

```

        void setNim(String nim){
            this.nim=nim;
        }

        String getNim(){
            return nim;
        }

        void inputData(){
            System.out.print ("Nim : ");nim=key.nextLine();
            System.out.print ("Nama : ");nama=key.nextLine();
            System.out.print ("Nilai Tugas : ");nilaiTugas=key.nextFloat();
            System.out.print ("Nilai UTS : ");nilaiUts=key.nextFloat();
            System.out.print ("Nilai UAS : ");nilaiUas=key.nextFloat();
        }

        void hitungNilai(){
            pNilaiTugas = nilaiTugas * 0.20f;
            pNilaiUts = nilaiUts * 0.35f;
            pNilaiUas = nilaiUas * 0.45f;
            nilaiAkhir = pNilaiUts + pNilaiTugas + pNilaiUas;
        }

        void cetakNilai(){
            System.out.println("NIM          : " + nim);
            System.out.println("Nama          : " + nama);
            System.out.println("Nilai UTS   : " + nilaiUts +" 20%   : " +pNilaiUts);
            System.out.println("Nilai Tugas : " + nilaiTugas +" 35%   : " +pNilaiTugas);
            System.out.println("Nilai UAS   : " + nilaiUas +" 45%   : " +pNilaiUas);
            System.out.println("Nilai Akhir : " + nilaiAkhir);
        }
    }
}

```

Code 2 : Class Nilai (Nilai.java)

```
public class Nilai {  
    public static void main(String[] args) {  
        Mahasiswa nilai = new Mahasiswa();  
        nilai.nim = "08982983";  
        nilai.nama = "Ghiyatsi";  
        nilai.nilaiTugas = 99;  
        nilai.nilaiUts = 87;  
        nilai.nilaiUas = 98;  
        nilai.hitungNilai();  
        nilai.cetakNilai();  
        Mahasiswa nilai2 = new Mahasiswa();  
        nilai2.inputData();  
        nilai2.hitungNilai();  
        nilai2.cetakNilai();  
        System.out.println();  
    }  
}
```

Output:

```
Node.js command prompt
D:\Pemrograman Berorientasi Objek\tugas\PRAKTIKUM_2_PBO>javac Nilai.java

D:\Pemrograman Berorientasi Objek\tugas\PRAKTIKUM_2_PBO>java Nilai
NIM          : 08982983
Nama         : Ghiyatsi
Nilai UTS    : 87.0  20%   : 30.449999
Nilai Tugas  : 99.0  35%   : 19.800001
Nilai UAS    : 98.0  45%   : 44.1
Nilai Akhir  : 94.35
Nim : A11.2022.14668
Nama : Restu
Nilai Tugas : 95
Nilai UTS   : 90
Nilai UAS   : 90
NIM         : A11.2022.14668
Nama        : Restu
Nilai UTS   : 90.0  20%   : 31.5
Nilai Tugas : 95.0  35%   : 19.0
Nilai UAS   : 90.0  45%   : 40.5
Nilai Akhir : 91.0

D:\Pemrograman Berorientasi Objek\tugas\PRAKTIKUM_2_PBO>|
```