Mata Kuliah : PBO – TI – S1

Pertemuan : 3

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Nama : Nila Farihah

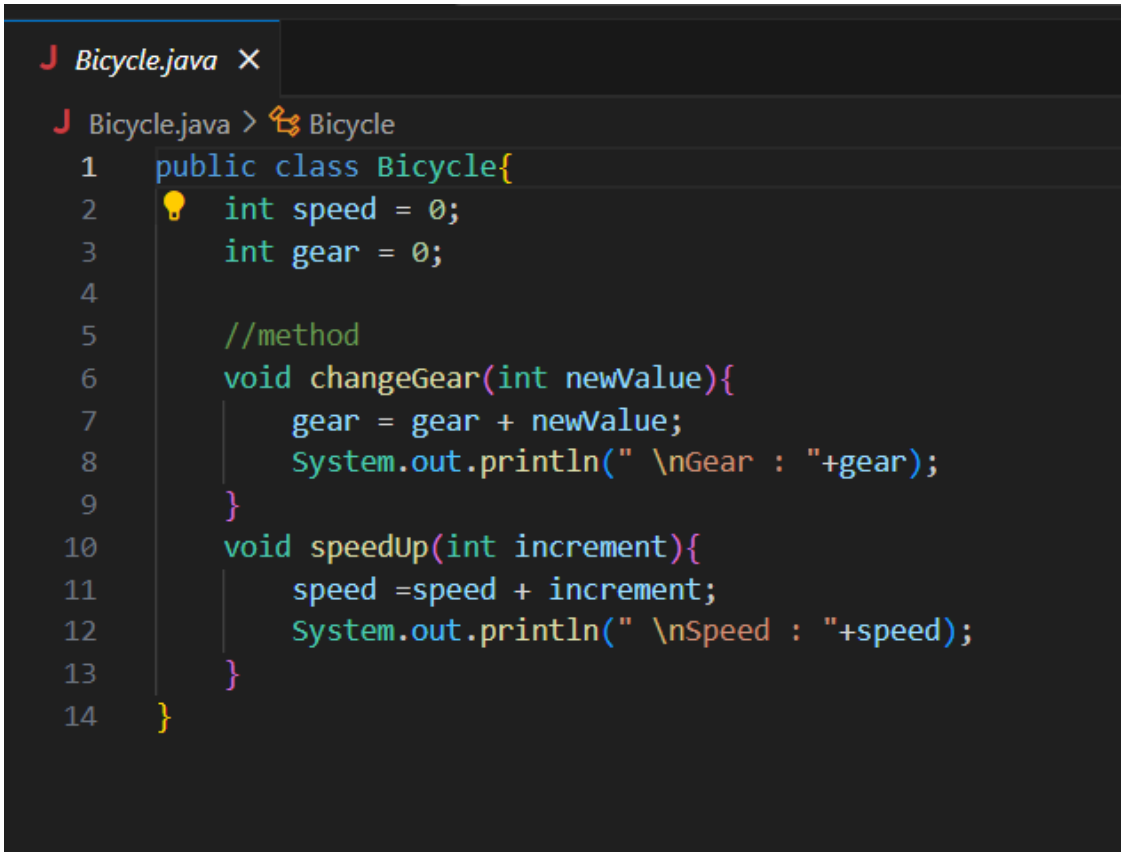
Hasil Program :

```
D:\A Nila\sem4\pbo\pertemuan3>javac BicycleDemo.java

D:\A Nila\sem4\pbo\pertemuan3>java BicycleDemo

Speed : 20

Gear : 4

D:\A Nila\sem4\pbo\pertemuan3>
```

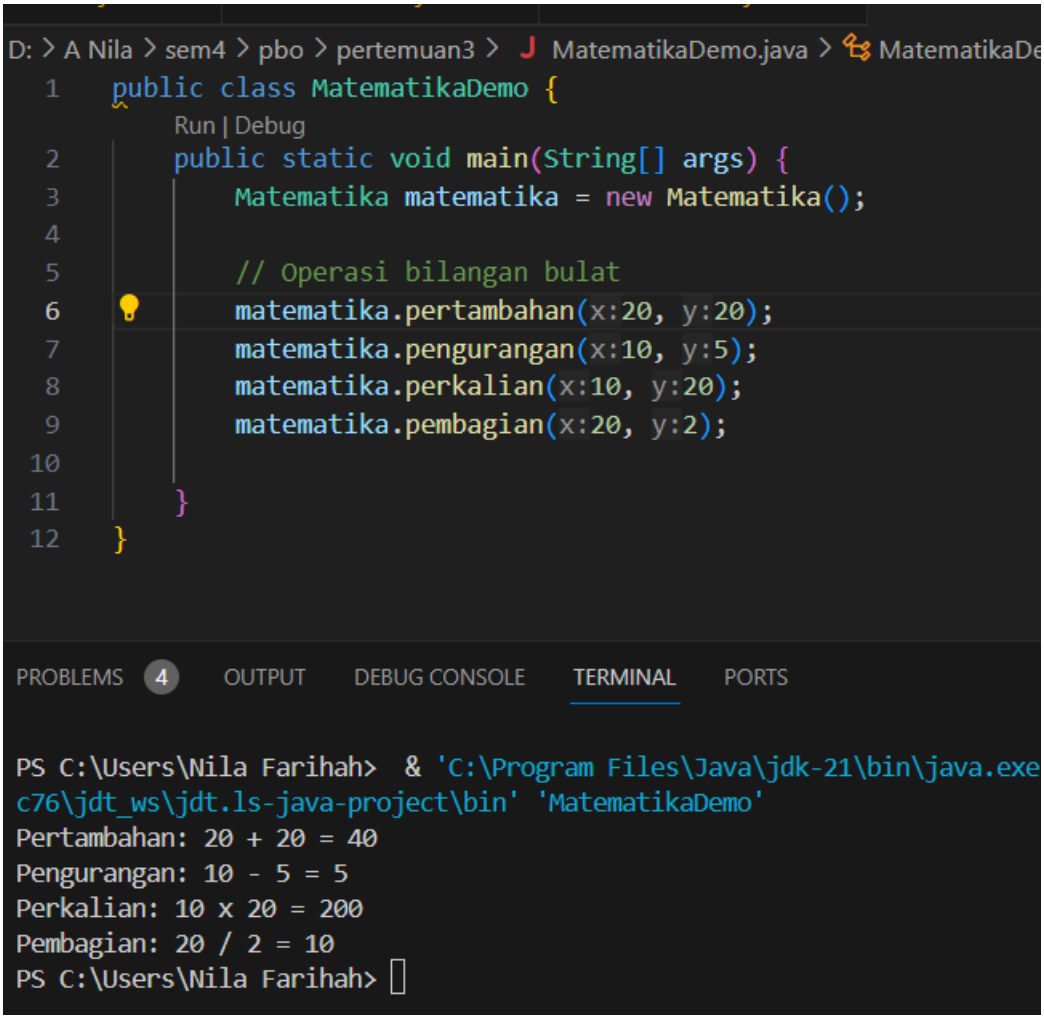
Kode Program :

BicycleDemo.java

```java
public class BicycleDemo{
    Run | Debug
    public static void main(String[] args){

        //membuat object
        Bicycle bike = new Bicycle();

        //memanggil atribut dan memberi nilai
        bike.speed=10;
        bike.gear=2;

        //Memanggil method dan menunjuk nilai parameter
        bike.speedUp(increment:10);
        bike.changeGear(newValue:2);
    }
}
```


Bicycle.java
Bicycle.java > Bicycle
public class Bicycle{
int speed = 0;
int gear = 0;
//method
void changeGear(int newValue){
gear = gear + newValue;
System.out.println(" \nGear : "+gear);
}
void speedUp(int increment){
speed =speed + increment;
System.out.println(" \nSpeed : "+speed);
}
}

Hasil Program :



Kode Program :

File "Matematika.java"

```
public class Matematika {
    public void pertambahan(int x, int y) {
        System.out.println("Pertambahan: " + x + " + " + y + " =
" + (x + y));
    }

    public void pengurangan(int x, int y) {
        System.out.println("Pengurangan: " + x + " - " + y + " =
" + (x - y));
    }

    public void perkalian(int x, int y) {
        System.out.println("Perkalian: " + x + " x " + y + " = "
+ (x * y));
```

```
        }

        public void pembagian(int x, int y) {
            if (y != 0) {
                System.out.println("Pembagian: " + x + " / " + y + "
    = " + (x / y));
            } else {
                System.out.println("Error: Pembagian dengan nol
    tidak diperbolehkan");
            }
        }

    }
```

File “MatematikaDemo.java”

```
    public class MatematikaDemo {
        public static void main(String[] args) {
            Matematika matematika = new Matematika();

            // Operasi bilangan bulat
            matematika.pertambahan(20, 20);
            matematika.pengurangan(10, 5);
            matematika.perkalian(10, 20);
            matematika.pembagian(20, 2);

        }
    }
```

Hasil Program :

```
D:\A Nila\sem4\pbo\pertemuan3>javac suhuDemo.java

D:\A Nila\sem4\pbo\pertemuan3>java suhuDemo
PROGRAM KONVERSI SUHU
=====================
Konversi suhu Celcius ke Kelvin          : 36 C adalah 309.15 K
Konversi suhu Celcius ke Farhenheit      : 36 C adalah 96.799995 F
Konversi suhu Celcius ke Rankine         : 36 C adalah 556.47003 Ra
Konversi suhu Celcius ke Dalisle         : 36 C adalah 96.0 De
Konversi suhu Celcius ke Newton          : 36 C adalah 11.0 N
Konversi suhu Celcius ke Reaumur         : 36 C adalah 28.800001 R
Konversi suhu Celcius ke Romer           : 36 C adalah 25.5 Ro

D:\A Nila\sem4\pbo\pertemuan3>
```

Kode Program :

MatematikaDemo.java ● | suhu.java ×

suhu.java > suhu > hitungDalisle(int)

```java
public class suhu {

    float hasil;
    int Celcius;

    public suhu(int Celcius){
        this.Celcius = Celcius;
    }

    public suhu(){}


    void hitungKelvin (int Celcius){
        System.out.println(x:"PROGRAM KONVERSI SUHU");
        System.out.println(x:"====================");
        hasil = Celcius + 273.15f;
        System.out.println("Konversi suhu Celcius ke Kelvin\t\t : "+ Celcius +" C adalah " + hasil + " K");
    }
    void hitungFarhenheit (int Celcius){
        hasil = Celcius * 1.8f + 32;
        System.out.println("Konversi suhu Celcius ke Farhenheit\t : "+ Celcius +" C adalah " + hasil + " F");
    }
    void hitungRankine (int Celcius){
        hasil = Celcius * 1.8f + 491.67f;
        System.out.println("Konversi suhu Celcius ke Rankine\t : "+ Celcius +" C adalah " + hasil + " Ra");
    }
    void hitungDalisle (int Celcius){
        hasil = (100 - Celcius) * 1.5f;
        System.out.println("Konversi suhu Celcius ke Dalisle\t : "+ Celcius +" C adalah " + hasil + " De");
    }
    void hitungNewton (int Celcius){
        hasil = Celcius * 33/100;
        System.out.println("Konversi suhu Celcius ke Newton\t\t : "+ Celcius +" C adalah " + hasil + " N");
    }
    void hitungReaumur (int Celcius){
        hasil = Celcius * 0.8f;
        System.out.println("Konversi suhu Celcius ke Reaumur\t : "+ Celcius +" C adalah " + hasil + " R");
```

File “suhu.java”

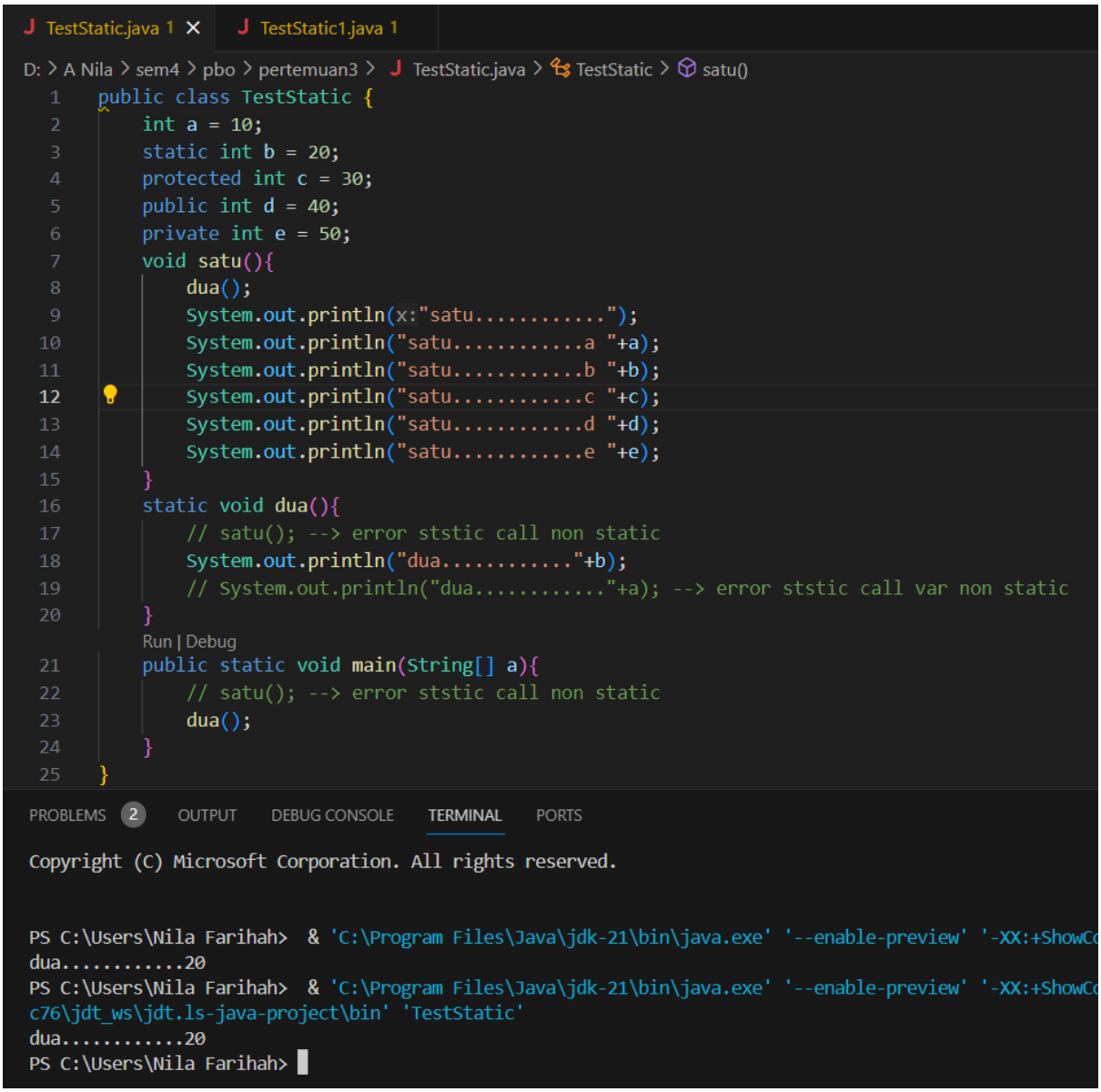
```
public class suhu {

    float hasil;
    int Celcius;

    public suhu(int Celcius){
        this.Celcius = Celcius;
    }

    public suhu(){}

    void hitungKelvin (int Celcius){
        System.out.println("PROGRAM KONVERSI SUHU");
        System.out.println("====================");
        hasil = Celcius + 273.15f;
        System.out.println("Konversi suhu Celcius ke Kelvin\t\t
: "+ Celcius +" C adalah " + hasil + " K");
    }
    void hitungFarhenheit (int Celcius){
        hasil = Celcius * 1.8f + 32;
        System.out.println("Konversi suhu Celcius ke
Farhenheit\t : "+ Celcius +" C adalah " + hasil + " F");
    }
    void hitungRankine (int Celcius){
        hasil = Celcius * 1.8f + 491.67f;
        System.out.println("Konversi suhu Celcius ke Rankine\t :
"+ Celcius +" C adalah " + hasil + " Ra");
    }
    void hitungDalisle (int Celcius){
        hasil = (100 - Celcius) * 1.5f;
        System.out.println("Konversi suhu Celcius ke Dalisle\t :
"+ Celcius +" C adalah " + hasil + " De");
    }
    void hitungNewton (int Celcius){
        hasil = Celcius * 33/100;
        System.out.println("Konversi suhu Celcius ke Newton\t\t
: "+ Celcius +" C adalah " + hasil + " N");
    }
    void hitungReaumur (int Celcius){
        hasil = Celcius * 0.8f;
        System.out.println("Konversi suhu Celcius ke Reaumur\t :
"+ Celcius +" C adalah " + hasil + " R");
    }
    void hitungRomer(int Celcius){
        hasil = Celcius * 21/40 + 7.5f;
        System.out.println("Konversi suhu Celcius ke Romer\t\t :
"+ Celcius +" C adalah " + hasil + " Ro");
```

```
        }
    }
```

File “suhuDemo.java”

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

            suhu Suhu = new suhu(36);
            Suhu.hitungKelvin(Suhu.Celcius);
            Suhu.hitungFarhenheit(Suhu.Celcius);
            Suhu.hitungRankine(Suhu.Celcius);
            Suhu.hitungDalisle(Suhu.Celcius);
            Suhu.hitungNewton(Suhu.Celcius);
            Suhu.hitungReaumur(Suhu.Celcius);
            Suhu.hitungRomer(Suhu.Celcius);
        }
    }
```

Hasil Program :



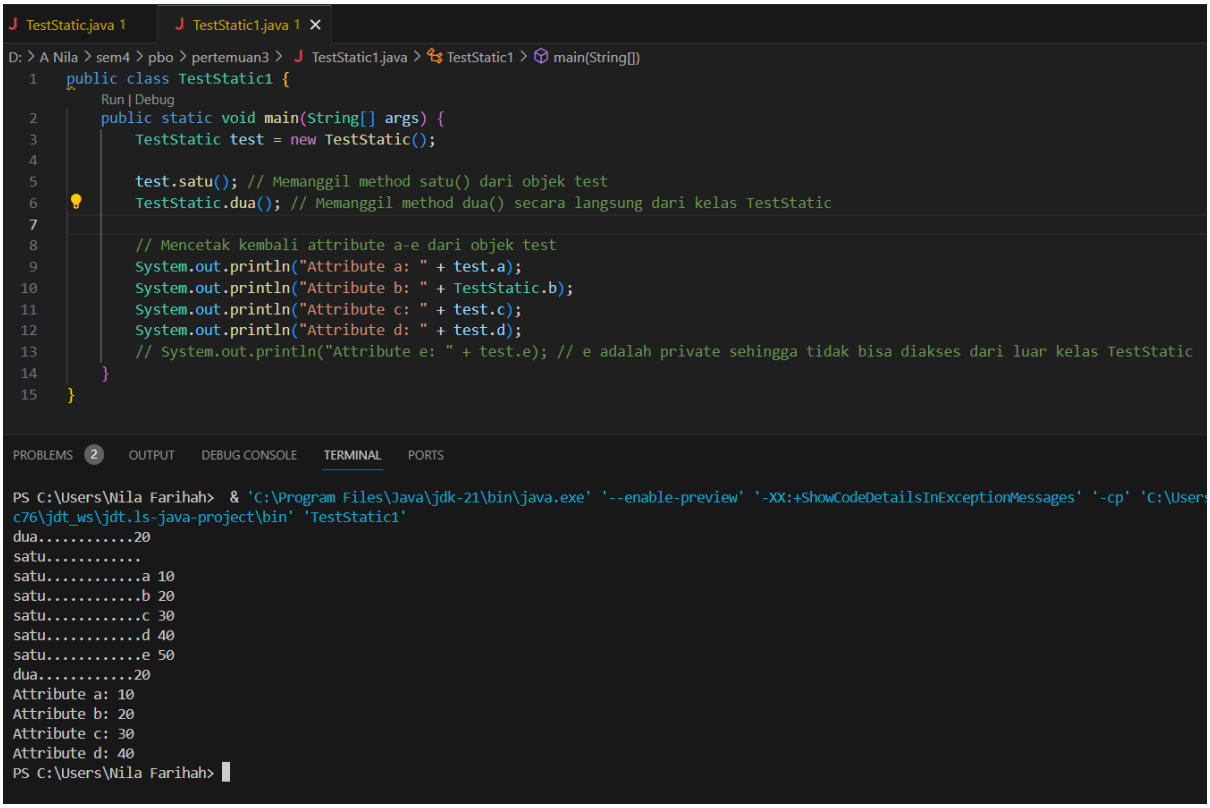
Kode Program :

File “TestStatic.java”

```
public class TestStatic {
    int a = 10;
    static int b = 20;
    protected int c = 30;
    public int d = 40;
    private int e = 50;
    void satu(){
        dua();
        System.out.println("satu.....");
```

```
        System.out.println("satu.....a "+a);
        System.out.println("satu.....b "+b);
        System.out.println("satu.....c "+c);
        System.out.println("satu.....d "+d);
        System.out.println("satu.....e "+e);
    }
    static void dua(){
        // satu(); --> error ststic call non static
        System.out.println("dua....."+b);
        // System.out.println("dua....."+a); --> error
ststic call var non static
    }
    public static void main(String[] a){
        // satu(); --> error ststic call non static
        dua();
    }
}
```

Hasil Program :



Kode Program :

File “TestStatic1.java”

```
public class TestStatic1 {
    public static void main(String[] args) {
        TestStatic test = new TestStatic();

        test.satu(); // Memanggil method satu() dari objek test
        TestStatic.dua(); // Memanggil method dua() secara
langsung dari kelas TestStatic

        // Mencetak kembali attribute a-e dari objek test
        System.out.println("Attribute a: " + test.a);
        System.out.println("Attribute b: " + TestStatic.b);
        System.out.println("Attribute c: " + test.c);
        System.out.println("Attribute d: " + test.d);
        // System.out.println("Attribute e: " + test.e); // e
adalah private sehingga tidak bisa diakses dari luar kelas
TestStatic
    }
}
```