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KELAS : 2C
MATKUL : PRAKTIKUM PBO (Jobsheet9)

4. Latihan

```
public class PerkalianKu {
 void perkalian(int a, int b){
  System.out.println(a * b);
 }
 void perkalian(int a, int b, int c){
  System.out.println(a * b * c);
 }
 public static void main(String args []){
  PerkalianKu objek = new PerkalianKu();
  objek.perkalian(25, 43);
  objek.perkalian(34, 23, 56);
 }
}
```

4.1 Dari source coding diatas terletak dimanakah overloading?
Jawab :

```
void perkalian(int a, int b){
 System.out.println(a * b);
}
void perkalian(int a, int b, int c){
 System.out.println(a * b * c);
}
```

4.2 Jika terdapat overloading ada berapa jumlah parameter yang berbeda?
Jawab : hanya 1 terletak pada c

```
public class PerkalianKu {
 void perkalian(int a, int b){
  System.out.println(a * b);
 }
 void perkalian(double a, double b){
  System.out.println(a * b);
 }
 public static void main(String args []){
  PerkalianKu objek = new PerkalianKu();
  objek.perkalian(25, 43);
  objek.perkalian(34.56, 23.7);
 }
}
```

4.3 Dari source coding diatas terletak dimanakah overloading?

```
void perkalian(int a, int b){
 System.out.println(a * b);
}
void perkalian(double a, double b){
 System.out.println(a * b);
}
```

Jawab :

4.4 Jika terdapat overloading ada berapa tipe parameter yang berbeda?
Jawab : 2, menggunakan tipe data int dan tipe data double

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```
class Ikan{
 public void swim(){
    System.out.println("Ikan bisa berenang");
 }
}
class Piranha extends Ikan{
 public void swim(){
    System.out.println("Piranha bisa makan daging");
 }
}
public class Fish {
 public static void main(String[] args) {
    Ikan a = new Ikan();
    Ikan b = new Piranha();
    a.swim();
    b.swim();
 }
}
```

4.5. Dari source coding diatas terletak dimanakah overriding?

Jawab :

```
class Piranha extends Ikan{
 public void swim(){
    System.out.println("Piranha bisa makan daging");
 }
}
```

4.6. Jabarkanlah apabila sourcoding diatas jika terdapat overriding?
Jawab: method swim () dari class piranha override method swim () dari parent class ikan

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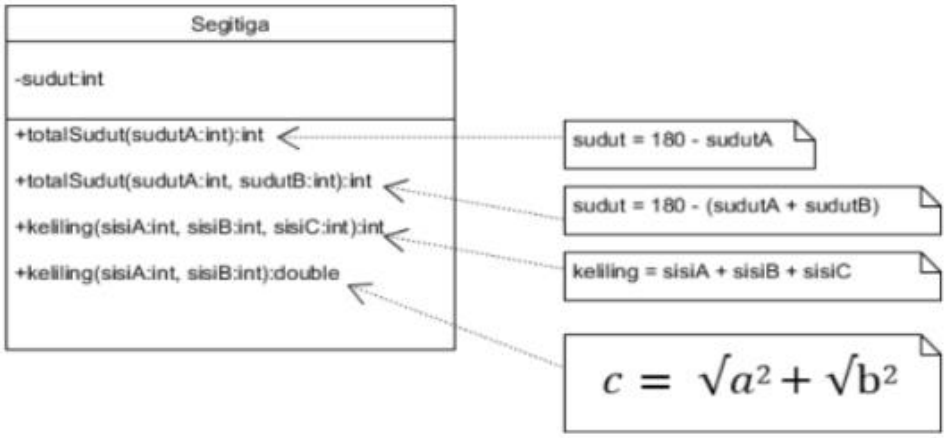
5. Tugas

5.1 Overloading

Implementasikan konsep overloading pada class diagram dibawah ini :



Jawab :

Class Segitiga

Output - Pertemuan7 (run) | Segitiga_13.java | Main_13.java

Source | History

```
/*
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package TugasNol;

/**
 *
 * @author ddiko
 */
public class Segitiga_13 {

    private int sudut;

    public int totalSudut(int sudutA) {
        this.sudut = 180 - sudutA;
        return this.sudut;
    }

    public int totalSudut(int sudutA, int sudutB) {
        this.sudut = 180 - (sudutA + sudutB);
        return this.sudut;
    }

    public int keliling(int sisiA, int sisiB, int sisiC) {
        int keliling = sisiA + sisiB + sisiC;
        return keliling;
    }

    public double keliling(int sisiA, int sisiB) {
        double sisiC = Math.sqrt(Math.pow(sisiA, 2) + Math.pow(sisiB, 2));
        double keliling = sisiA + sisiB + sisiC;
        return keliling;
    }
}
```

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Class Main

Output - Pertemuan7 (run) × Segitiga_13.java × Main_13.java ×

Source History

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package TugasNo1;

/**
 *
 * @author ddiko
 */
public class Main_13 {

    public static void main(String[] args) {
        Segitiga_13 putra = new Segitiga_13();
        System.out.println("Total Sudut 1 = " + putra.totalSudut(130));
        System.out.println("Total Sudut 2 = " + putra.totalSudut(60, 30));
        System.out.println("Keliling Segitiga 1 = " + putra.keliling(5, 5, 4));
        System.out.println("Keliling Segitiga 2 = " + putra.keliling(12, 5));
    }
}
```

Output

Output - Pertemuan7 (run) × Segitiga_13.java × Main_13.java ×

```
run:
Total Sudut 1 = 50
Total Sudut 2 = 90
Keliling Segitiga 1 = 14
Keliling Segitiga 2 = 30.0
BUILD SUCCESSFUL (total time: 0 seconds)
```

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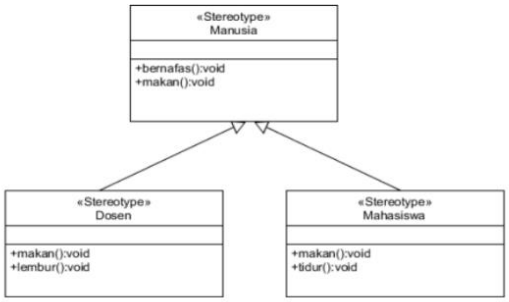
5.2 Overriding

Implementasikan class diagram dibawah ini dengan menggunakan teknik dynamic method dispatch :



Jawab :

Class Mahasiswa

Output - Pertemuan7 (run) | Manusia_13.java | Dosen_13.java | Mahasiswa_13.java | Main_13.java

Source | History

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package TugasNo2;

/**
 *
 * @author ddiko
 */
public class Manusia_13 {

    public void bernafas() {
        System.out.println("Sedang Bernafas.");
    }

    public void makan() {
        System.out.println("Sedang Makan.");
    }
}
```

Class Dosen

Output - Pertemuan7 (run) | Manusia_13.java | Dosen_13.java | Mahasiswa_13.java | Main_13.java

Source | History

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package TugasNo2;

/**
 *
 * @author ddiko
 */
public class Dosen_13 extends Manusia_13 {

    public void makan() {
        System.out.println("Dosen sedang Makan.");
    }

    public void lembur() {
        System.out.println("Dosen sedang Lembur.");
    }

}
```

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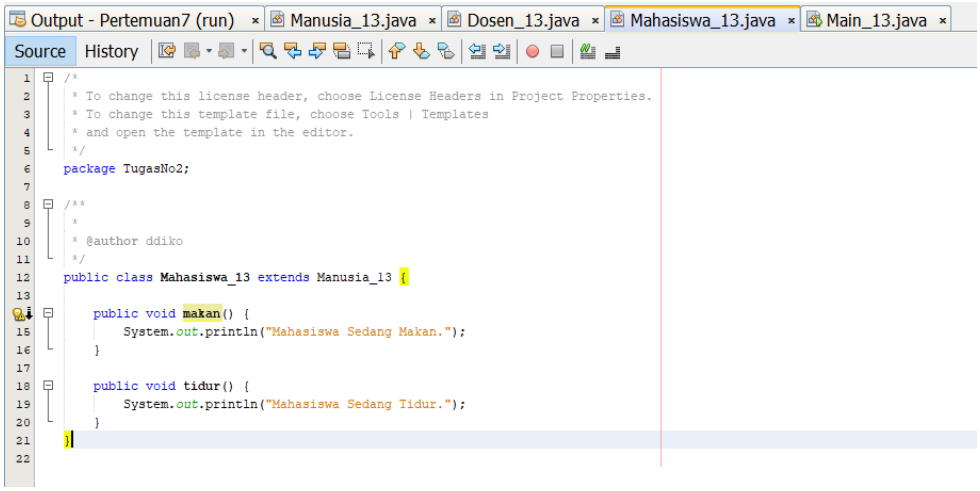
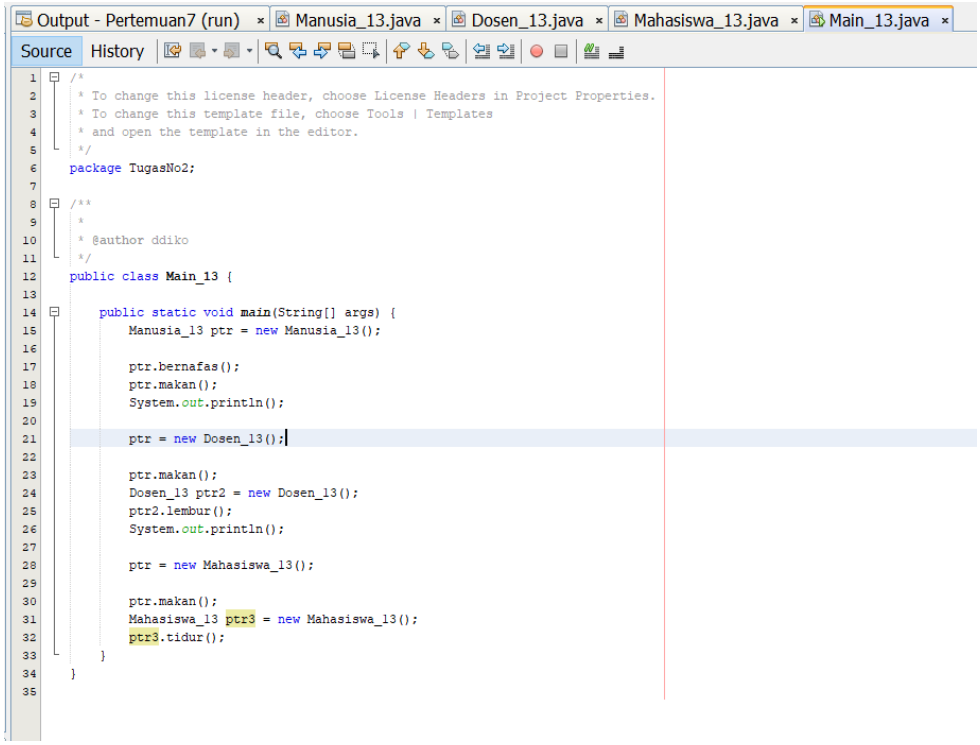
Class mahasiswa



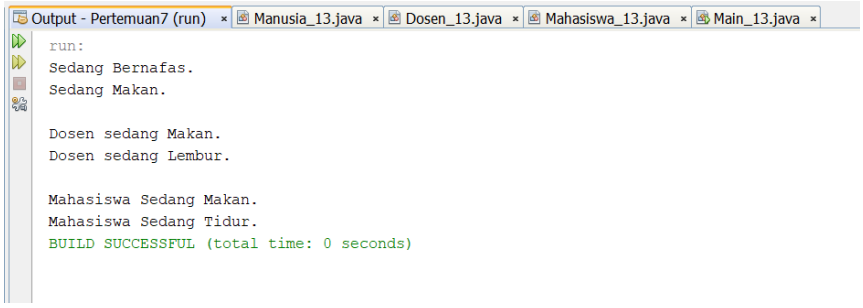

```java
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package TugasNo2;

/**
 *
 * @author ddiko
 */
public class Mahasiswa_13 extends Manusia_13 {

    public void makan() {
        System.out.println("Mahasiswa Sedang Makan.");
    }

    public void tidur() {
        System.out.println("Mahasiswa Sedang Tidur.");
    }
}
```

Class main




```java
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package TugasNo2;

/**
 *
 * @author ddiko
 */
public class Main_13 {

    public static void main(String[] args) {
        Manusia_13 ptr = new Manusia_13();

        ptr.bernafas();
        ptr.makan();
        System.out.println();

        ptr = new Dosen_13();

        ptr.makan();
        Dosen_13 ptr2 = new Dosen_13();
        ptr2.lembur();
        System.out.println();

        ptr = new Mahasiswa_13();

        ptr.makan();
        Mahasiswa_13 ptr3 = new Mahasiswa_13();
        ptr3.tidur();
    }
}
```

Output




```
run:
Sedang Bernafas.
Sedang Makan.

Dosen sedang Makan.
Dosen sedang Lembur.

Mahasiswa Sedang Makan.
Mahasiswa Sedang Tidur.
BUILD SUCCESSFUL (total time: 0 seconds)
```

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