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Latihan 1.

The screenshot shows a Java IDE with a file named `LocalVariable.java` open. The code defines a class `LocalVariable` with two methods: `hitungUsia()` and `beratBadan()`. The `hitungUsia()` method calculates the current age based on birth year and current year. The `beratBadan()` method calculates weight based on birth weight and current age. The `main` method creates an instance of `LocalVariable` and calls both methods. The IDE shows compilation errors in the `main` method. The first error is on line 17, where `usia.hitungusia();` is called. The error message is: "location: class LocalVariable LocalVariable.java:17: error: cannot find symbol usia.hitungusia();". The second error is on line 18, where `usia.beratBadan();` is called. The error message is: "location: class LocalVariable LocalVariable.java:18: error: cannot find symbol usia.beratBadan();". The IDE also shows the command prompt output, which displays the same error messages.

```
public class LocalVariable {
    public void hitungUsia() {
        int tahunSekarang = 2019;
        int tahunLahir = 1997;
        int usia = 0;
        usia = tahunSekarang - tahunLahir;
        System.out.println("Usia Saya : " + usia);
    }
    public void beratBadan() {
        int berat = 0;
        int beratLahir = 3;
        berat = beratLahir + (usia/2);
        System.out.println("Berat badan saya : " + berat + "Kg");
    }
    public static void main(String[] args) {
        LocalVariable usia = new LocalVariable();
        usia.hitungusia();
        usia.beratBadan();
    }
}
```

```
location: class LocalVariable
LocalVariable.java:17: error: cannot find symbol
    usia.hitungusia();
    ^
symbol: method hitungusia()
location: variable usia of type LocalVariable
2 errors

E:\>javac LocalVariable.java
LocalVariable.java:17: error: cannot find symbol
    usia.hitungusia();
    ^
symbol: method hitungusia()
location: variable usia of type LocalVariable
1 error

E:\>javac LocalVariable.java
LocalVariable.java:18: error: cannot find symbol
    berat = beratLahir + (usia/2);
    ^
symbol: variable usia
location: class LocalVariable
LocalVariable.java:18: error: cannot find symbol
    usia.beratBadan();
    ^
symbol: method hitungusia()
location: variable usia of type LocalVariable
2 errors

E:\>
```

Tidak bias berjalan karena Local Variable hanya dapat digunakan pada method tersebut saja.

Latihan 2.

The screenshot shows a Java IDE with the file `LocalVariable.java` open. The code defines a class `LocalVariable` with two methods: `hitungUsia()` and `beratBadan()`. The `main` method creates an instance of `LocalVariable` and calls both methods. The IDE shows several compilation errors in the Command Prompt:

```
1 error
E:\>javac LocalVariable.java
LocalVariable.java:13: error: cannot find symbol
    berat = beratLahir + (usia/2);
                        ^
    symbol:   variable usia
    location: class LocalVariable
LocalVariable.java:18: error: cannot find symbol
    usia.hitungusia();
    ^
    symbol:   method hitungusia()
    location: variable usia of type LocalVariable
2 errors
E:\>javac LocalVariable.java
LocalVariable.java:17: error: cannot find symbol
    usia.hitungusia();
    ^
    symbol:   method hitungusia()
    location: variable usia of type LocalVariable
1 error
E:\>javac LocalVariable.java
E:\>java LocalVariable
Usia Saya : 22
Berat badan saya : 14Kg
E:\>
```

The IDE status bar at the bottom indicates "Line 17, Column 21" and "Tab Size: 4". The Windows taskbar at the bottom shows the date and time as "2:11 AM 10/4/2019".

Latihan 3.

The screenshot shows a Java IDE with the following code in `Pegawai.java`:

```
1 public class Pegawai{
2     String nama;
3     int nip;
4     double gaji;
5     public String setName(String nama){
6         return this.nama = nama;
7     }
8
9     public int setNip(int nip){
10        return this.nip = nip;
11    }
12
13    public double SetGaji(double gaji){
14        return this.gaji = gaji;
15    }
16
17    public static void main(String[] args){
18        Pegawai haha1 = new Pegawai();
19        Pegawai haha2 = new Pegawai();
20        Pegawai haha3 = new Pegawai();
21        Pegawai haha4 = new Pegawai();
22        Pegawai haha5 = new Pegawai();
23
24        haha1.setName("Aku");
25        haha1.setNip(666666);
26        haha1.SetGaji(400000);
27        haha1.cetakPegawai();
28
29        haha2.setName("Kamu");
30        haha2.setNip(666766);
31        haha2.SetGaji(800000);
32        haha2.cetakPegawai();
33
34        haha3.setName("Dia");
35        haha3.setNip(466666);
36        haha3.SetGaji(300000);
37        haha3.cetakPegawai();
38
39        haha4.setName("Gbtan");
40        haha4.setNip(446666);
41        haha4.SetGaji(780000);
42        haha4.cetakPegawai();
43
44        haha5.setName("Mumet");
45        haha5.setNip(689666);
46        haha5.SetGaji(470000);
47        haha5.cetakPegawai();
48    }
49    void cetakPegawai(){
50        System.out.println(
51            "Nama Pegawai : " + nama + "\n" +
52            "NIP Pegawai : " + nip + "\n" +
53            "Gaji Pegawai : " + gaji + "\n"
54        );
55    }
56 }
```

The command prompt shows the following output:

```
E:\> javac Pegawai.java
E:\> java Pegawai
Nama Pegawai : Aku
NIP Pegawai : 666666
Gaji Pegawai : 400000.0

Nama Pegawai : Kamu
NIP Pegawai : 666766
Gaji Pegawai : 800000.0

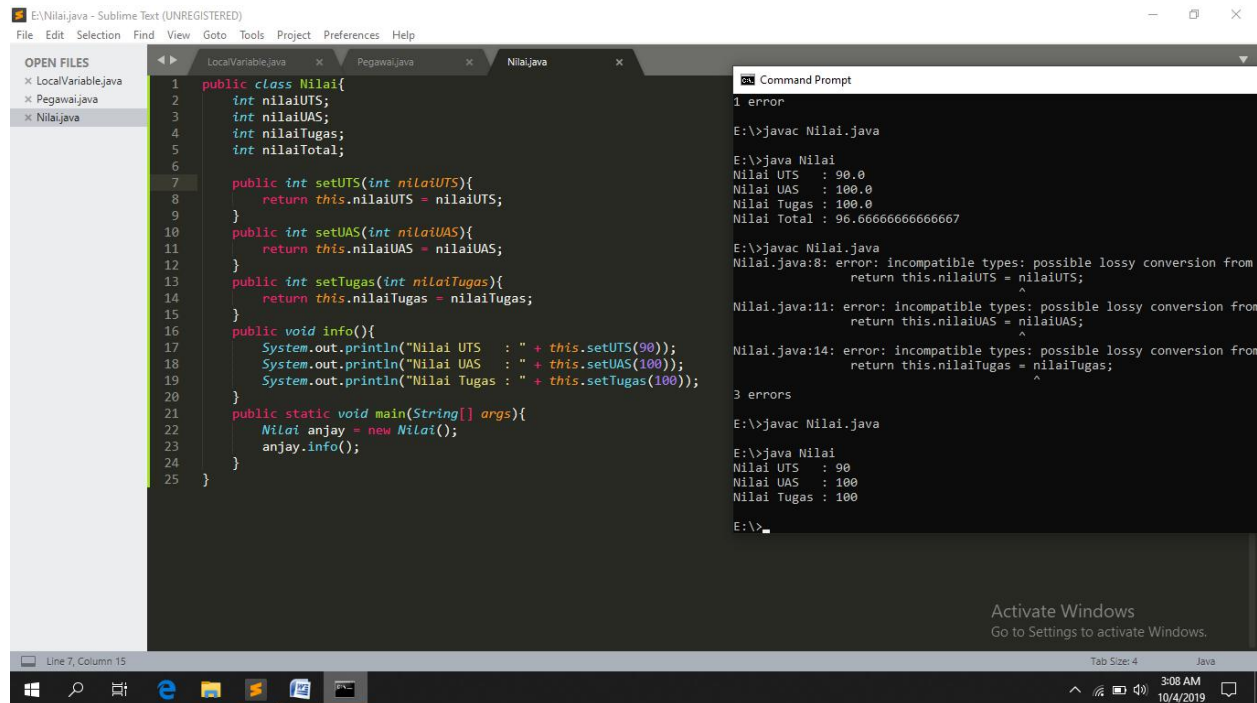
Nama Pegawai : Dia
NIP Pegawai : 466666
Gaji Pegawai : 300000.0

Nama Pegawai : Gbtan
NIP Pegawai : 446666
Gaji Pegawai : 780000.0

Nama Pegawai : Mumet
NIP Pegawai : 689666
Gaji Pegawai : 470000.0

E:\>
```

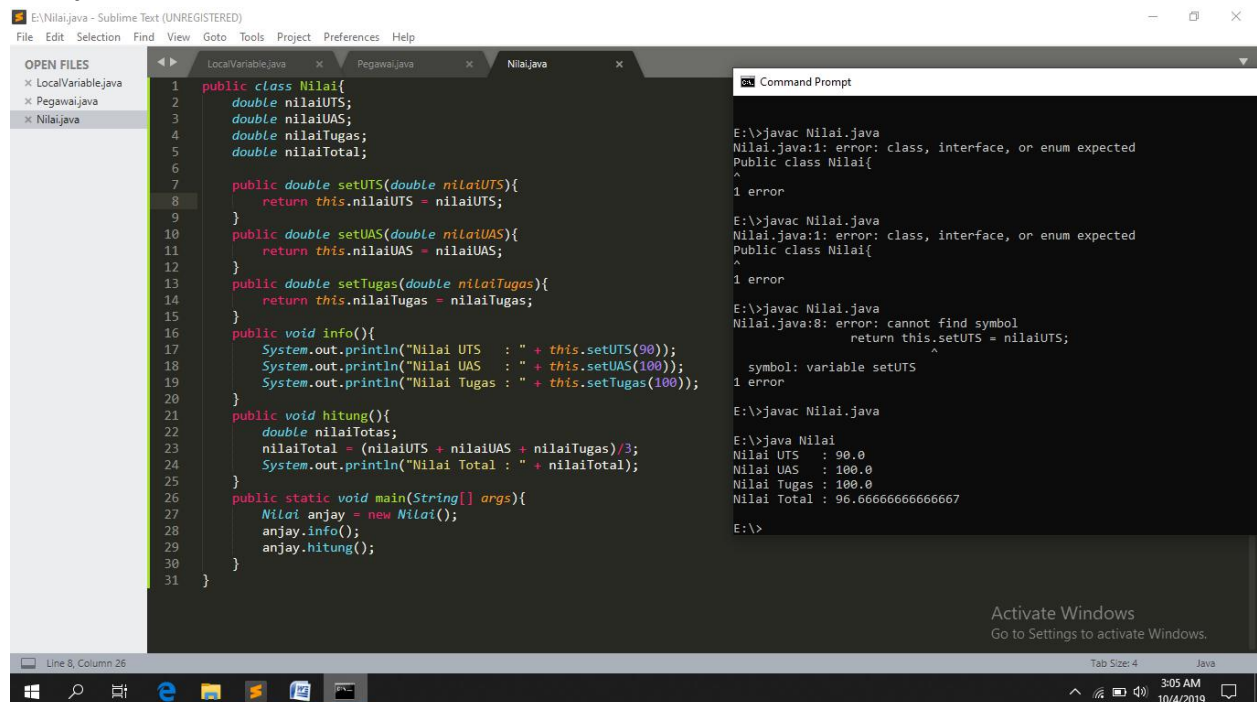
Pekerjaan rumah 1.



```
1 public class Nilai{
2     int nilaiUTS;
3     int nilaiUAS;
4     int nilaiTugas;
5     int nilaiTotal;
6
7     public int setUTS(int nilaiUTS){
8         return this.nilaiUTS = nilaiUTS;
9     }
10    public int setUAS(int nilaiUAS){
11        return this.nilaiUAS = nilaiUAS;
12    }
13    public int setTugas(int nilaiTugas){
14        return this.nilaiTugas = nilaiTugas;
15    }
16    public void info(){
17        System.out.println("Nilai UTS : " + this.setUTS(90));
18        System.out.println("Nilai UAS : " + this.setUAS(100));
19        System.out.println("Nilai Tugas : " + this.setTugas(100));
20    }
21    public static void main(String[] args){
22        Nilai anjay = new Nilai();
23        anjay.info();
24    }
25 }
```

```
E:\>javac Nilai.java
E:\>java Nilai
Nilai UTS : 90.0
Nilai UAS : 100.0
Nilai Tugas : 100.0
Nilai Total : 96.66666666666667
E:\>javac Nilai.java
Nilai.java:8: error: incompatible types: possible lossy conversion from
return this.nilaiUTS = nilaiUTS;
^
Nilai.java:11: error: incompatible types: possible lossy conversion from
return this.nilaiUAS = nilaiUAS;
^
Nilai.java:14: error: incompatible types: possible lossy conversion from
return this.nilaiTugas = nilaiTugas;
^
3 errors
E:\>javac Nilai.java
E:\>java Nilai
Nilai UTS : 90
Nilai UAS : 100
Nilai Tugas : 100
E:\>
```

Pekerjaan rumah 2.



```
1 public class Nilai{
2     double nilaiUTS;
3     double nilaiUAS;
4     double nilaiTugas;
5     double nilaiTotal;
6
7     public double setUTS(double nilaiUTS){
8         return this.nilaiUTS = nilaiUTS;
9     }
10    public double setUAS(double nilaiUAS){
11        return this.nilaiUAS = nilaiUAS;
12    }
13    public double setTugas(double nilaiTugas){
14        return this.nilaiTugas = nilaiTugas;
15    }
16    public void info(){
17        System.out.println("Nilai UTS : " + this.setUTS(90));
18        System.out.println("Nilai UAS : " + this.setUAS(100));
19        System.out.println("Nilai Tugas : " + this.setTugas(100));
20    }
21    public void hitung(){
22        double nilaiTotal;
23        nilaiTotal = (nilaiUTS + nilaiUAS + nilaiTugas)/3;
24        System.out.println("Nilai Total : " + nilaiTotal);
25    }
26    public static void main(String[] args){
27        Nilai anjay = new Nilai();
28        anjay.info();
29        anjay.hitung();
30    }
31 }
```

```
E:\>javac Nilai.java
Nilai.java:1: error: class, interface, or enum expected
Public class Nilai{
^
1 error
E:\>javac Nilai.java
Nilai.java:1: error: class, interface, or enum expected
Public class Nilai{
^
1 error
E:\>javac Nilai.java
Nilai.java:8: error: cannot find symbol
return this.setUTS = nilaiUTS;
^
symbol: variable setUTS
1 error
E:\>javac Nilai.java
E:\>java Nilai
Nilai UTS : 90.0
Nilai UAS : 100.0
Nilai Tugas : 100.0
Nilai Total : 96.66666666666667
E:\>
```