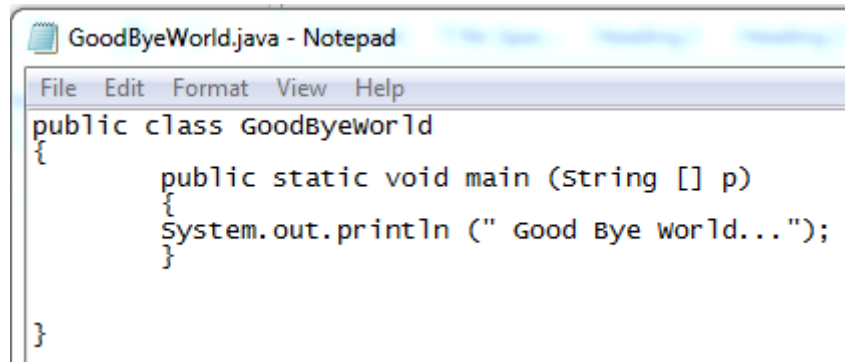


Nama : Alvina Tansy Pulungan
NIM : 0701181070
Kelas : Ilmu Komputer-1/V
Mata Kuliah : Pemrograman Berorientasi Komputer
Dosen : Muhammad Siddik Hasibuan, M.Kom

Partisipasi !

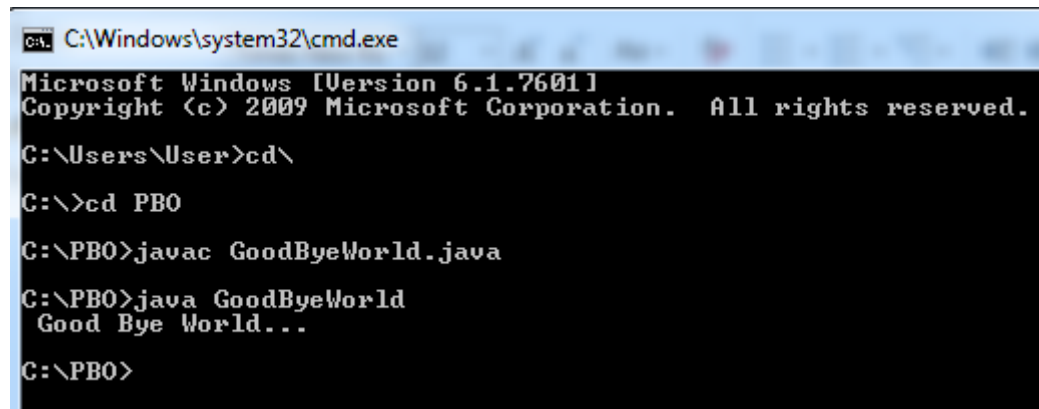
1. Praktek Pengantar PBO

1.1.Source Code GoodByeWorld



```
GoodByeWorld.java - Notepad
File Edit Format View Help
public class GoodByeworld
{
    public static void main (String [] p)
    {
        System.out.println (" Good Bye world...");
    }
}
```

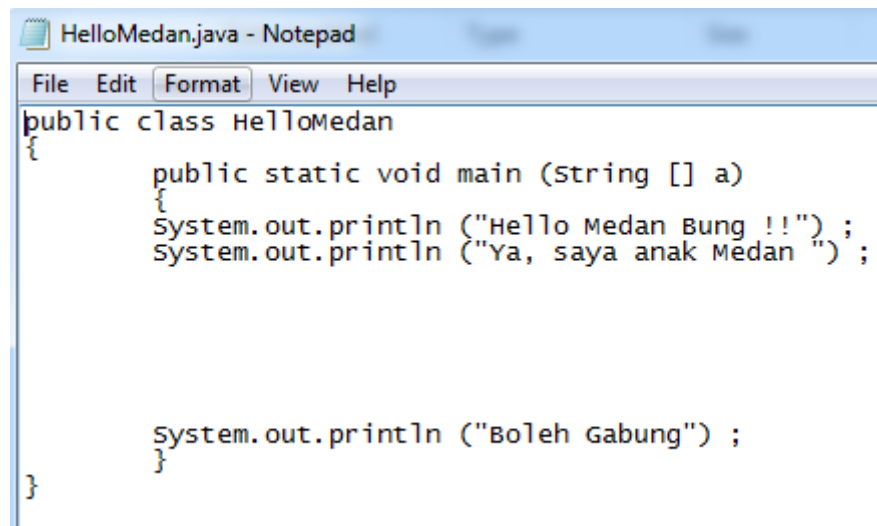
Hasil



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac GoodByeWorld.java
C:\PBO>java GoodByeWorld
Good Bye World...
C:\PBO>
```

1.2.Source Code HelloMedan



```
HelloMedan.java - Notepad
File Edit Format View Help
public class HelloMedan
{
    public static void main (String [] a)
    {
        System.out.println ("Hello Medan Bung !!") ;
        System.out.println ("Ya, saya anak Medan ") ;

        System.out.println ("Boleh Gabung") ;
    }
}
```

Hasil

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac HelloMedan.java
C:\PBO>java HelloMedan
Hello Medan Bung ??
Ya, saya anak Medan
Boleh Gabung
C:\PBO>
```

2. Praktek Variable

2.1.Source Code Variable

```
Variable.java - Notepad
File Edit Format View Help
public class Variable
{
    public static void main (String [] y)
    {
        int uang = 1000;
        char huruf = 'a';
        boolean benar = true;

        System.out.println("Uang : " +uang);
        System.out.println("Huruf : " +huruf);
        System.out.println("Benar : " +benar);
    }
}
```

Hasil

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac Variable.java
C:\PBO>java Variable
Uang : 1000
Huruf : a
Benar : true
C:\PBO>
```

2.2.Source Code VariableLatihan

```
VariableLatihan.java - Notepad
File Edit Format View Help
public class VariableLatihan {
    public static void main (String [] t) {
        //deklarasi variable
        int a = 1000, b = 200, tambah = a+b, kurang = a-b, bagi = a/b, modulo = a&b;

        System.out.println ("===PENJUMLAHAN===");
        System.out.println ("Hasil dari Variable A : "+a);
        System.out.println ("Hasil dari Variable B : "+b);
        System.out.println ("Hasil dari variable A dan Variable B : "+tambah);
        System.out.println ("-----");
        System.out.println ("===PENGURANGAN===");
        System.out.println ("Hasil dari Variable A : "+a);
        System.out.println ("Hasil dari Variable B : "+b);
        System.out.println ("Hasil dari variable A dan Variable B : "+kurang);
        System.out.println ("-----");
        System.out.println ("===PEMBAGIAN===");
        System.out.println ("Hasil dari Variable A : "+a);
        System.out.println ("Hasil dari Variable B : "+b);
        System.out.println ("Hasil dari variable A dan Variable B : "+bagi);
        System.out.println ("-----");
        System.out.println ("===SISA BAGI===");
        System.out.println ("Hasil dari Variable A : "+a);
        System.out.println ("Hasil dari Variable B : "+b);
        System.out.println ("Hasil dari variable A dan Variable B : "+modulo);
        System.out.println ("-----");
    }
}
```

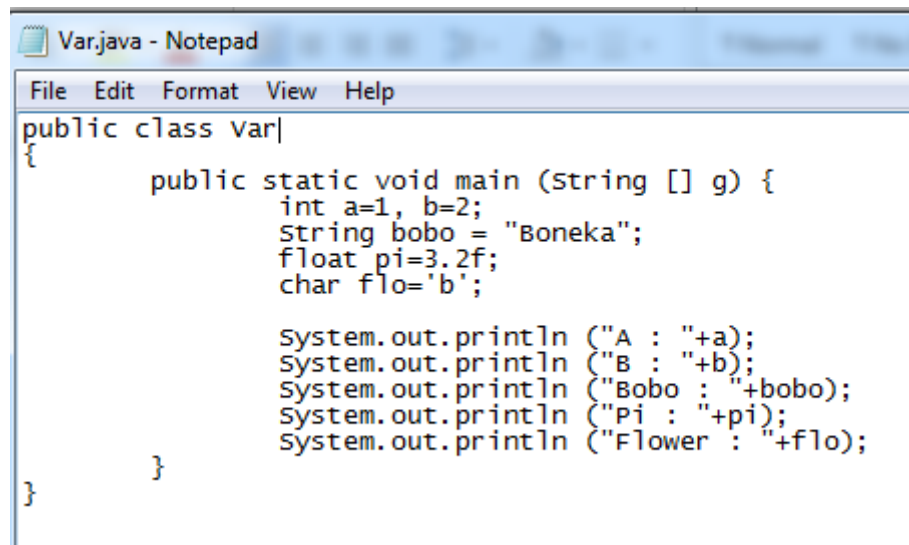
Hasil

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac VariableLatihan.java
C:\PBO>java VariableLatihan
===PENJUMLAHAN===
Hasil dari Variable A : 1000
Hasil dari Variable B : 200
Hasil dari Variable A dan Variable B : 1200
-----
===PENGURANGAN===
Hasil dari Variable A : 1000
Hasil dari Variable B : 200
Hasil dari Variable A dan Variable B : 800
-----
===PEMBAGIAN===
Hasil dari Variable A : 1000
Hasil dari Variable B : 200
Hasil dari Variable A dan Variable B : 5
-----
===SISA BAGI===
Hasil dari Variable A : 1000
Hasil dari Variable B : 200
Hasil dari Variable A dan Variable B : 200
-----

C:\PBO>
```

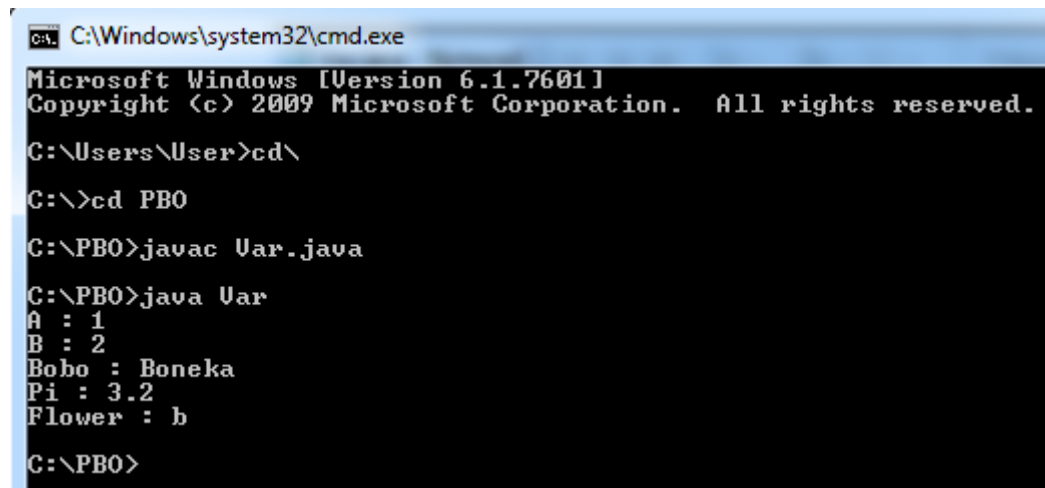
2.3.Source Code Var



```
File Edit Format View Help
public class Var{
    public static void main (String [] g) {
        int a=1, b=2;
        String bobo = "Boneka";
        float pi=3.2f;
        char flo='b';

        System.out.println ("A : "+a);
        System.out.println ("B : "+b);
        System.out.println ("Bobo : "+bobo);
        System.out.println ("Pi : "+pi);
        System.out.println ("Flower : "+flo);
    }
}
```

Hasil



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac Var.java
C:\PBO>java Var
A : 1
B : 2
Bobo : Boneka
Pi : 3.2
Flower : b
C:\PBO>
```

3. Praktek Operator dalam Java

3.1. Source Code OperatorAritmatika

```
OperatorAritmatika.java - Notepad
File Edit Format View Help
public class operatorAritmatika {
    public static void main (String [] g)
    {
        //Deklarasi variabel
        int a=10, b=20;

        //variable kompleks
        int tambah=a+b, kurang=b-a, kali=a*b, bagi=b/a, modulo=a%b;

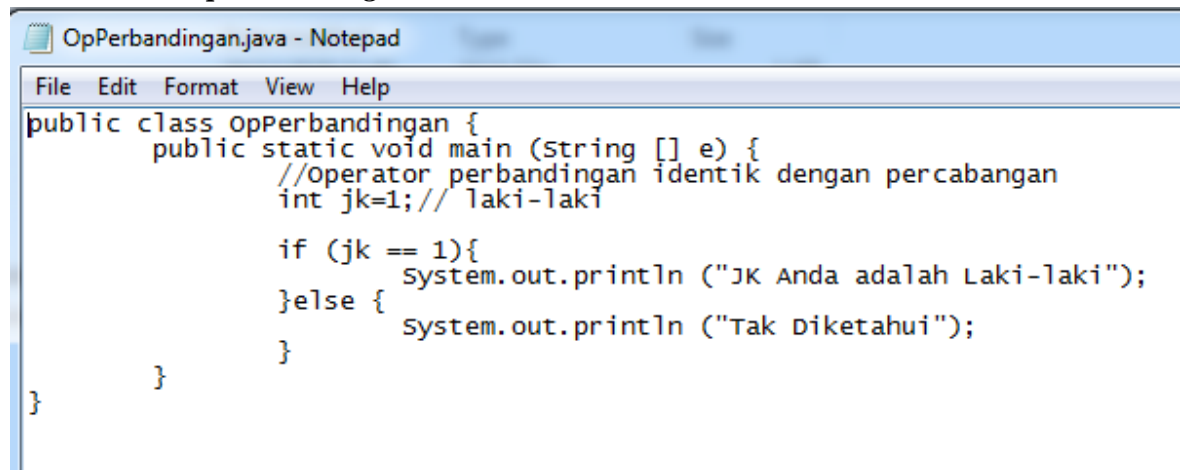
        System.out.println ("Ini Bilangan A : " +a);
        System.out.println ("Ini Bilangan B : " +b);
        System.out.println ("Hasil Jumlah : " +tambah);
        System.out.println ("=====");
        System.out.println ("Hasil Kurang : " +kurang);
        System.out.println ("=====");
        System.out.println ("Hasil Kali : " +kali);
        System.out.println ("=====");
        System.out.println ("Hasil Bagi : " +bagi);
        System.out.println ("=====");
        System.out.println ("Hasil Modulo : " +modulo);
        System.out.println ("=====");
    }
}
```

Hasil

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PB0
C:\PB0>javac OperatorAritmatika.java
C:\PB0>java OperatorAritmatika
Ini Bilangan A : 10
Ini Bilangan B : 20
Hasil Jumlah : 30
=====
Hasil Kurang : 10
=====
Hasil Kali : 200
=====
Hasil Bagi : 2
=====
Hasil Modulo : 10
=====
C:\PB0>
```

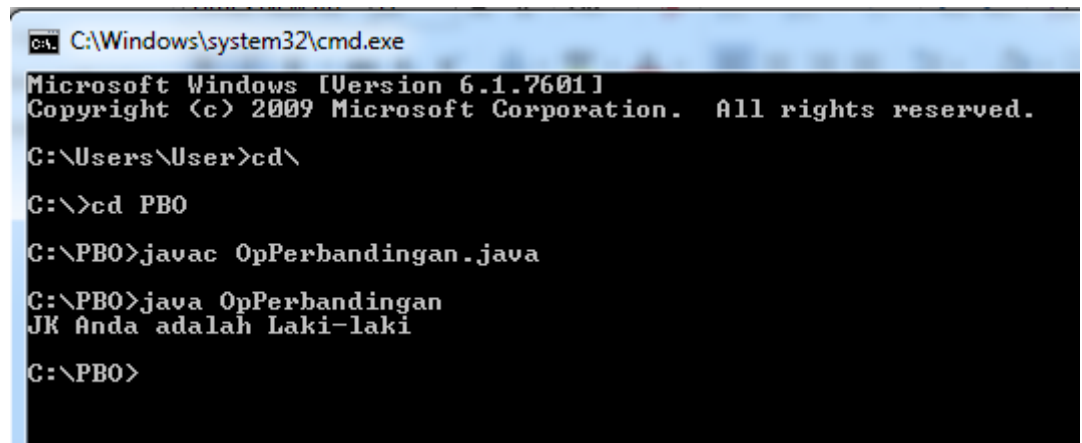
3.2. Source Code OpPerbandingan



```
OpPerbandingan.java - Notepad
File Edit Format View Help
public class OpPerbandingan {
    public static void main (String [] e) {
        //operator perbandingan identik dengan percabangan
        int jk=1;// laki-laki

        if (jk == 1){
            System.out.println ("JK Anda adalah Laki-laki");
        }else {
            System.out.println ("Tak Diketahui");
        }
    }
}
```

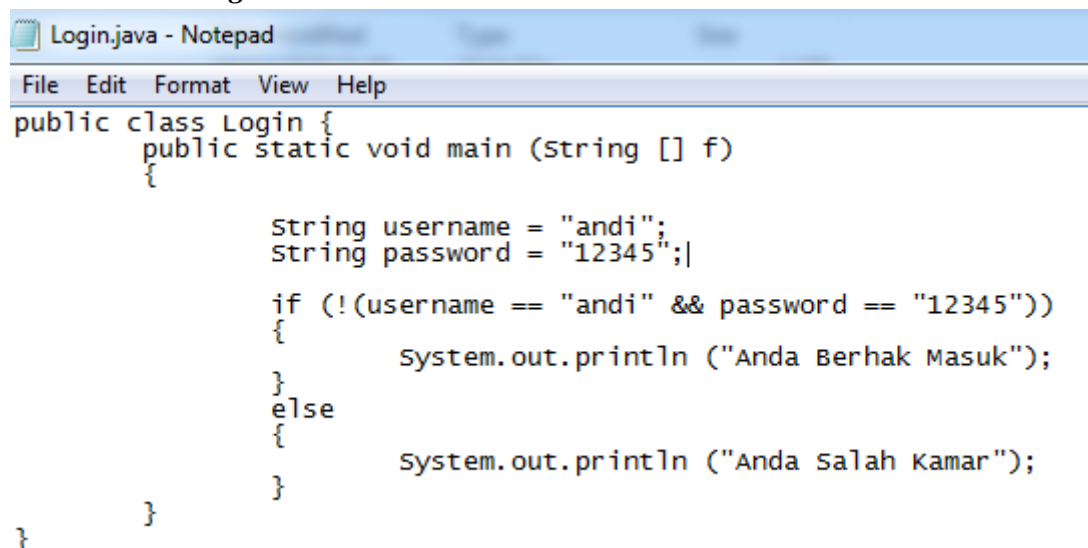
Hasil



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd \
C:\>cd PBO
C:\PBO>javac OpPerbandingan.java
C:\PBO>java OpPerbandingan
JK Anda adalah Laki-laki
C:\PBO>
```

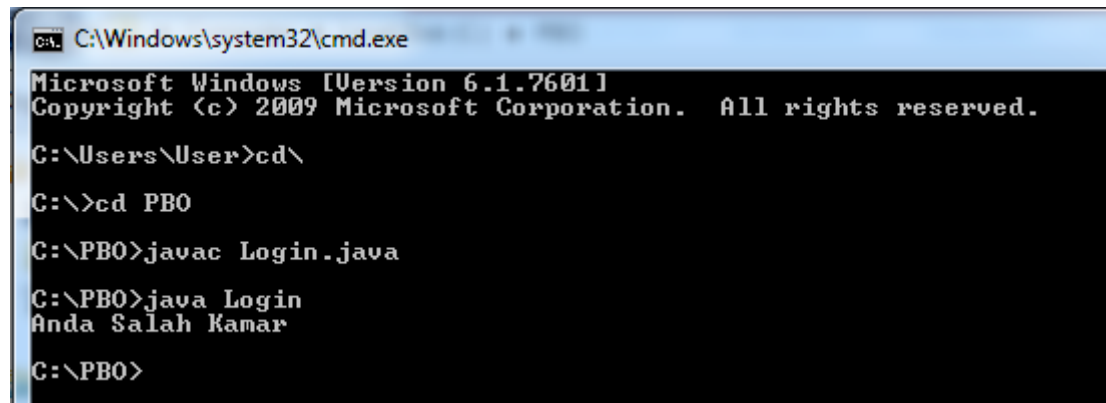
3.3. Source Code Login



```
Login.java - Notepad
File Edit Format View Help
public class Login {
    public static void main (String [] f)
    {
        String username = "andi";
        String password = "12345";

        if (!(username == "andi" && password == "12345"))
        {
            System.out.println ("Anda Berhak Masuk");
        }
        else
        {
            System.out.println ("Anda salah kamar");
        }
    }
}
```

Hasil

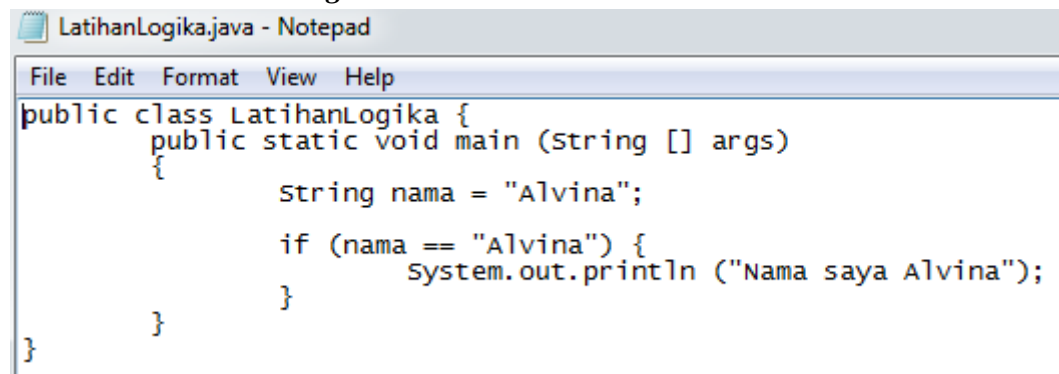


```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac Login.java
C:\PBO>java Login
Anda Salah Kamar
C:\PBO>
```

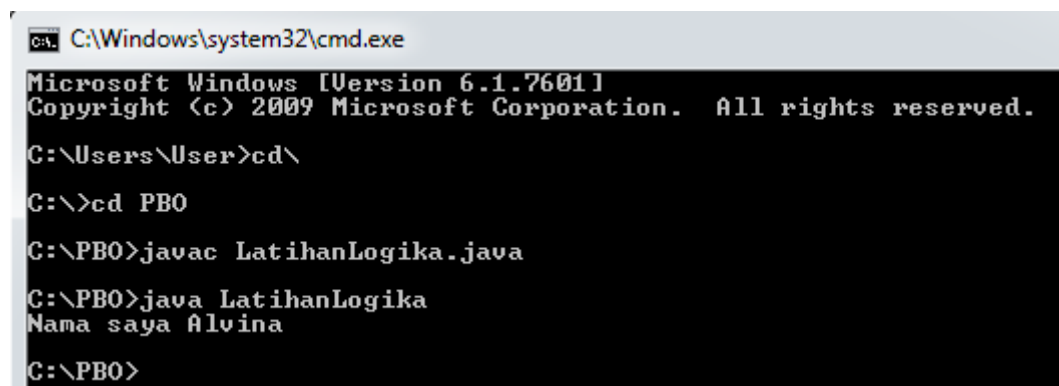
4. Praktek Struktur Kontrol

4.1.Source Code LatihanLogika



```
LatihanLogika.java - Notepad
File Edit Format View Help
public class LatihanLogika {
    public static void main (String [] args)
    {
        string nama = "Alvina";
        if (nama == "Alvina") {
            System.out.println ("Nama saya Alvina");
        }
    }
}
```

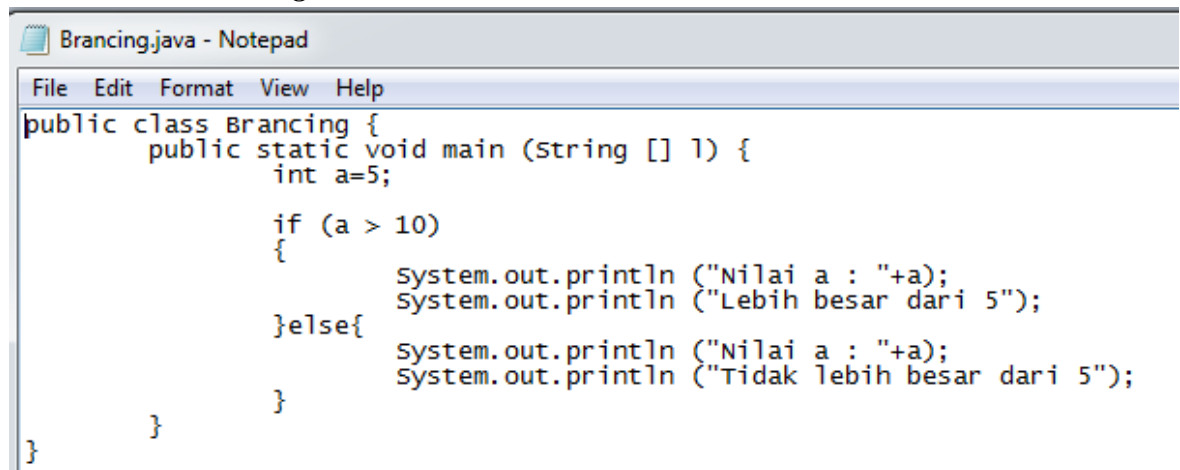
Hasil



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

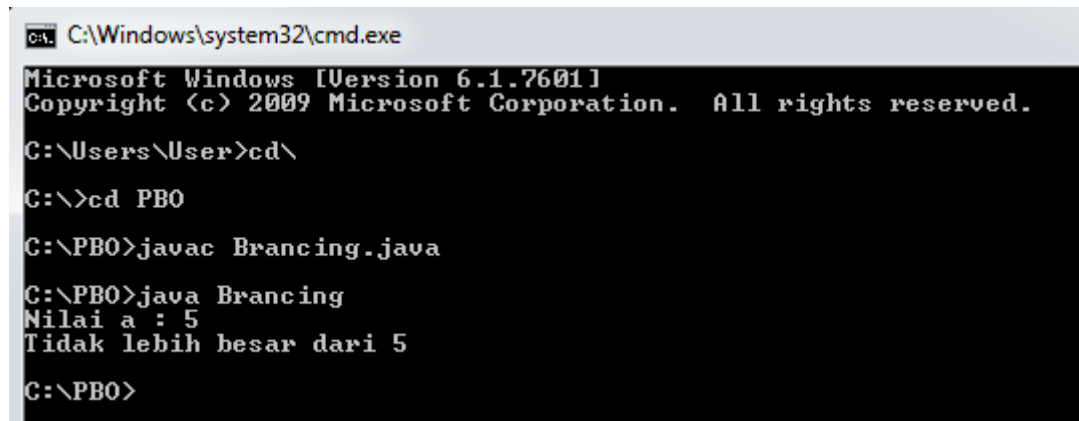
C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac LatihanLogika.java
C:\PBO>java LatihanLogika
Nama saya Alvina
C:\PBO>
```

4.2.Source Code Brancing



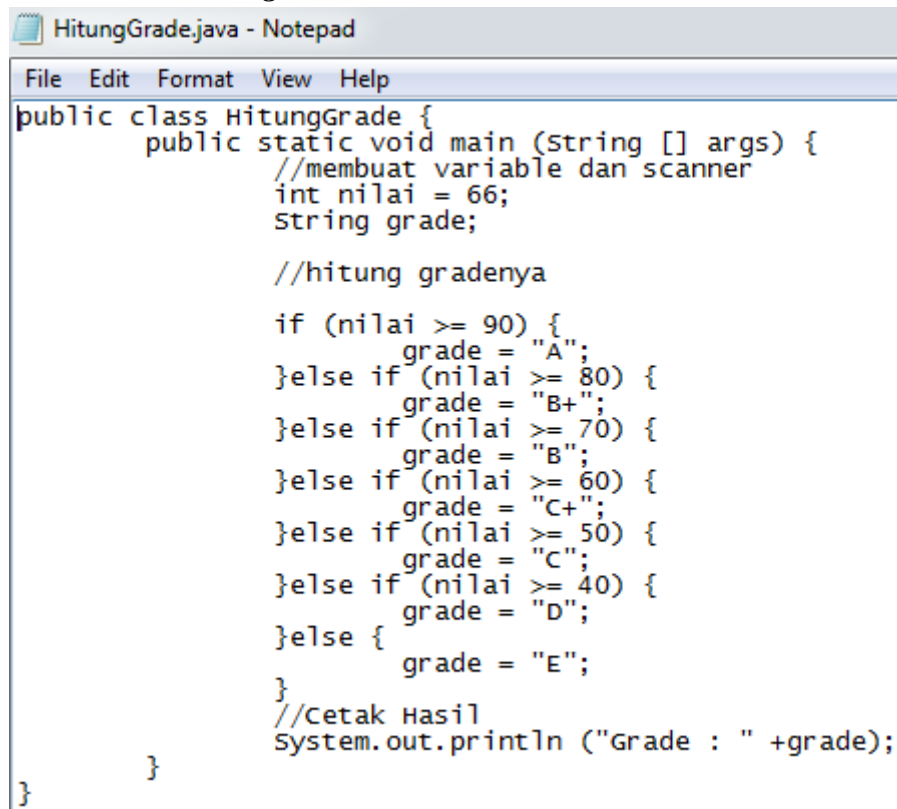
```
public class Brancing {  
    public static void main (String [] l) {  
        int a=5;  
  
        if (a > 10)  
        {  
            System.out.println ("Nilai a : "+a);  
            System.out.println ("Lebih besar dari 5");  
        }else{  
            System.out.println ("Nilai a : "+a);  
            System.out.println ("Tidak lebih besar dari 5");  
        }  
    }  
}
```

Hasil



```
C:\Windows\system32\cmd.exe  
Microsoft Windows [Version 6.1.7601]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.  
C:\Users\User>cd\  
C:\>cd PB0  
C:\PB0>javac Brancing.java  
C:\PB0>java Brancing  
Nilai a : 5  
Tidak lebih besar dari 5  
C:\PB0>
```


4.3.Source Code *HitungGrade*

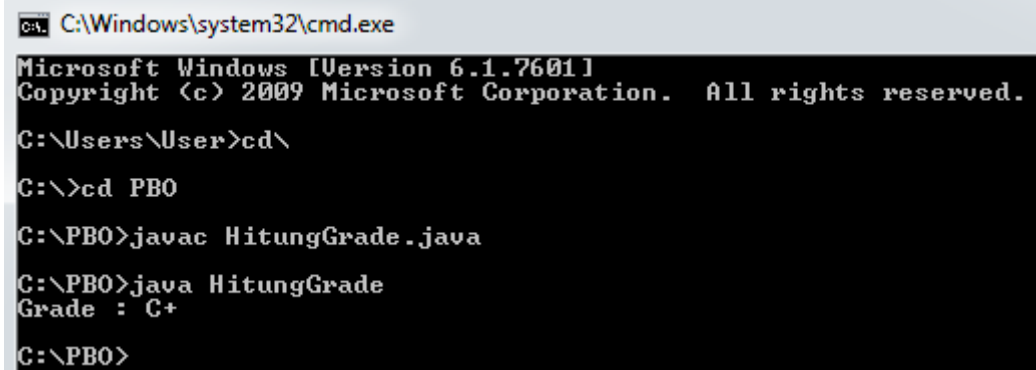


```
HitungGrade.java - Notepad
File Edit Format View Help
public class HitungGrade {
    public static void main (String [] args) {
        //membuat variable dan scanner
        int nilai = 66;
        String grade;

        //hitung gradenya

        if (nilai >= 90) {
            grade = "A";
        }else if (nilai >= 80) {
            grade = "B+";
        }else if (nilai >= 70) {
            grade = "B";
        }else if (nilai >= 60) {
            grade = "C+";
        }else if (nilai >= 50) {
            grade = "C";
        }else if (nilai >= 40) {
            grade = "D";
        }else {
            grade = "E";
        }
        //Cetak Hasil
        System.out.println ("Grade : " +grade);
    }
}
```

Hasil



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PB0
C:\PB0>javac HitungGrade.java
C:\PB0>java HitungGrade
Grade : C+
C:\PB0>
```

4.4. Source Code LampuLaluLintasWithSwitch

```
LampuLaluLintasWithSwitch.java - Notepad
File Edit Format View Help
import java.util.Scanner;

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

        //membuat variabel dan Scanner
        String lampu;
        Scanner scan = new Scanner (System.in);

        // mengambil input
        System.out.print ("Inputkan nama warna :");
        lampu = scan.nextLine();

        switch (lampu) {
            case "merah" :
                System.out.println ("Lampu merah, berhenti");
                break;
            case "kuning" :
                System.out.println ("Lampu kuning, harap hati-hati");
                break;
            case "hijau" :
                System.out.println ("Lampu hijau, silahkan jalan");
                break;
            default :
                System.out.println ("warna lampu salah!");
        }
    }
}
```

Hasil

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PB0
C:\PB0>javac LampuLaluLintasWithSwitch.java
C:\PB0>java LampuLaluLintasWithSwitch
Inputkan nama warna :Hijau
Warna lampu salah!

C:\PB0>java LampuLaluLintasWithSwitch
Inputkan nama warna :merah
Lampu merah, berhenti

C:\PB0>
```

4.5.Source Code Kasir

```
Kasir.java - Notepad
File Edit Format View Help
import java.util.Scanner;

public class Kasir {
    public static void main (String [] args) {
        //deklarasi variable dan Scanner
        int belanjaan, diskon, bayar;
        String kartu;
        Scanner scan = new Scanner (System.in);

        //mengambil input
        System.out.print ("Apakah ada kartu member : ");
        kartu = scan.nextLine();
        System.out.print ("Total belanjaan : ");
        belanjaan = scan.nextInt();

        //proses
        if (kartu.equalsIgnoreCase("ya")) {
            if (belanjaan > 500000) {
                diskon = 50000;
            }else if (belanjaan > 100000) {
                diskon = 15000;
            }else {
                diskon = 0;
            }
        }else {
            if (belanjaan > 100000) {
                diskon = 5000;
            }else {
                diskon = 0;
            }
        }

        //total yang harus dibayar
        bayar = belanjaan - diskon;

        //output
        System.out.println ("Total Bayar : Rp "+bayar);
    }
}
```

Hasil

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac Kasir.java
C:\PBO>java Kasir
Apakah ada kartu member : tidak
Total belanjaan : 203
Total Bayar : Rp 203
C:\PBO>
```

4.6.Source Code Tilang

```
Tilang.java - Notepad
File Edit Format View Help
public class Tilang {
    public static void main (String [] args) {
        boolean SIM = false;
        boolean STNK = true;

        // cek apakah dia akan ditilang atau tidak
        if (SIM == true) {
            if (STNK == true) {
                system.out.println ("Tidak ditilang!");
            }
            else {
                system.out.println ("Anda ditilang !");
            }
        }
    }
}
```

Hasil

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac Tilang.java
C:\PBO>java Tilang
Anda ditilang !
C:\PBO>
```

5. Praktek Array

5.1.Source Code Array

```
Array.java - Notepad
File Edit Format View Help
public class Array {
    public static void main (String [] y)
    {
        int [] nilai = {90,80,70};
        system.out.println ("Jumlah Element : " +nilai.length);
        system.out.println ("Element 0 : " +nilai[0]);
        system.out.println ("Element 1 : " +nilai[1]);
        system.out.println ("Element 2 : " +nilai[2]);
    }
}
```

Hasil

```

C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\

C:\>cd PB0

C:\PB0>javac Array.java

C:\PB0>java Array
Jumlah Element : 3
Element 0 : 90
Element 1 : 80
Element 2 : 70
C:\PB0>

```

5.2.Source Code Array2

```

Array2.java - Notepad
File Edit Format View Help
public class Array2{
    public static void main (String [] args) {
        String [] kumpulanString = new String [6];
        int [] kumpulanInt = new int [6];

        kumpulanString[0] = "Perkenalkan";
        kumpulanString[1] = "nama";
        kumpulanString[2] = "saya";
        kumpulanString[3] = "adalah";
        kumpulanString[4] = "Alvina";
        kumpulanString[5] = "Tansy";

        kumpulanInt [0] = 121;
        kumpulanInt [1] = 2324;
        kumpulanInt [2] = 300;
        kumpulanInt [3] = 343;
        kumpulanInt [4] = 12;
        kumpulanInt [5] = 50;

        System.out.println (kumpulanString[4]);
        System.out.println (kumpulanInt[5]);
    }
}

```

Hasil

```

C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\

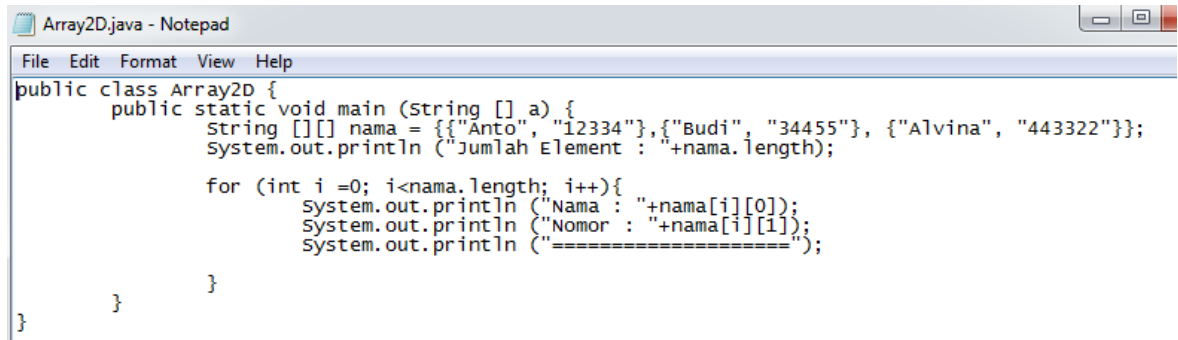
C:\>cd PB0

C:\PB0>javac Array2.java

C:\PB0>java Array2
Alvina
50
C:\PB0>

```

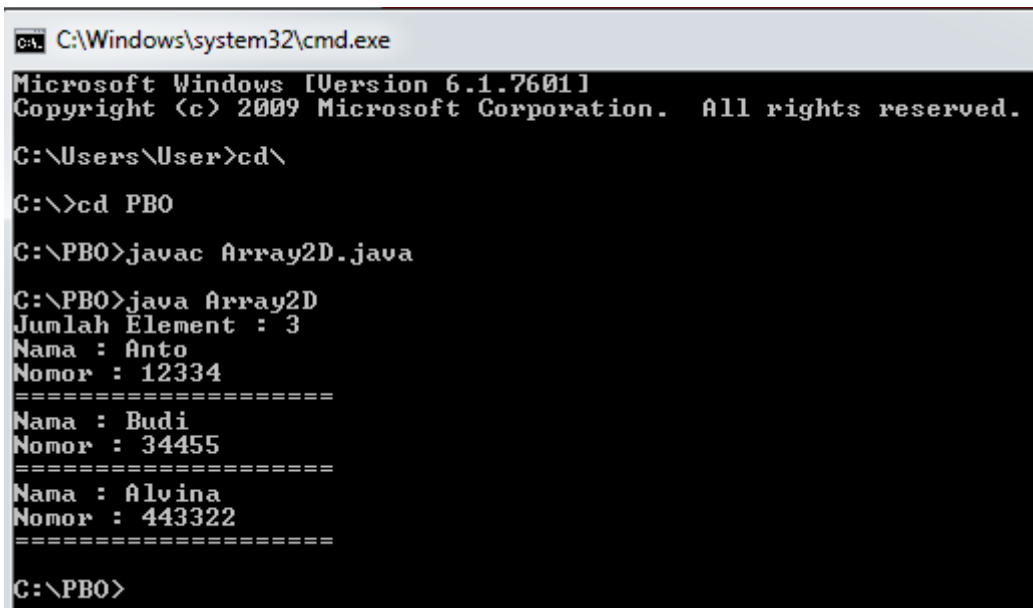
5.3.Source Code Array2D



```
Array2D.java - Notepad
File Edit Format View Help
public class Array2D {
    public static void main (String [] a) {
        String [][] nama = {"Anto", "12334"}, {"Budi", "34455"}, {"Alvina", "443322"};
        System.out.println ("Jumlah Element : "+nama.length);

        for (int i =0; i<nama.length; i++){
            System.out.println ("Nama : "+nama[i][0]);
            System.out.println ("Nomor : "+nama[i][1]);
            System.out.println ("=====");
        }
    }
}
```

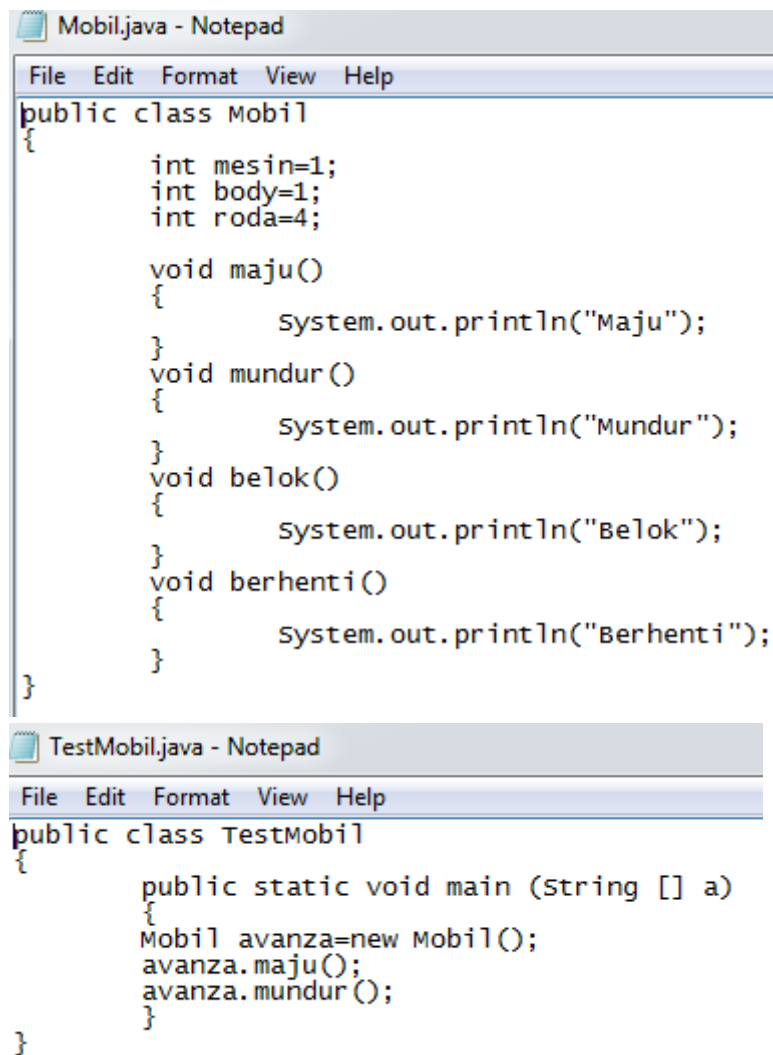
Hasil



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PBO
C:\PBO>javac Array2D.java
C:\PBO>java Array2D
Jumlah Element : 3
Nama : Anto
Nomor : 12334
=====
Nama : Budi
Nomor : 34455
=====
Nama : Alvina
Nomor : 443322
=====
C:\PBO>
```

5.4.Source Code TestMobil

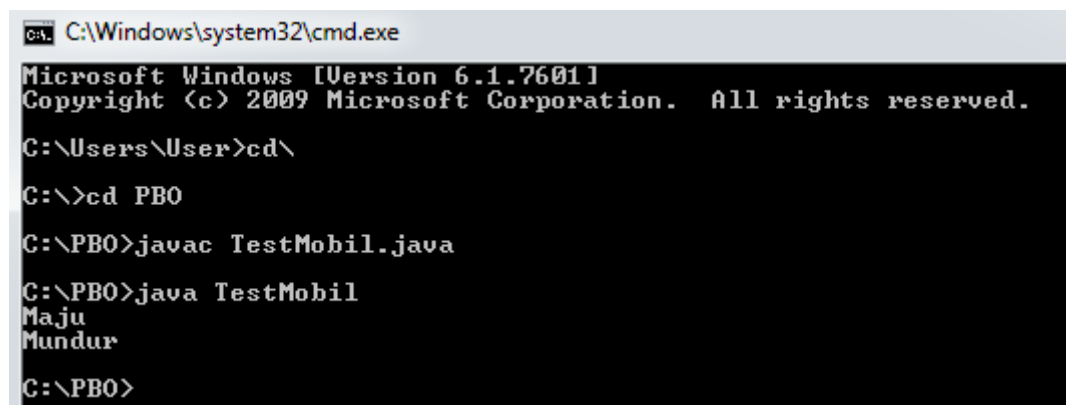


```
Mobil.java - Notepad
File Edit Format View Help
public class Mobil
{
    int mesin=1;
    int body=1;
    int roda=4;

    void maju()
    {
        System.out.println("Maju");
    }
    void mundur()
    {
        System.out.println("Mundur");
    }
    void belok()
    {
        System.out.println("Belok");
    }
    void berhenti()
    {
        System.out.println("Berhenti");
    }
}

TestMobil.java - Notepad
File Edit Format View Help
public class TestMobil
{
    public static void main (String [] a)
    {
        Mobil avanza=new Mobil();
        avanza.maju();
        avanza.mundur();
    }
}
```

Hasil



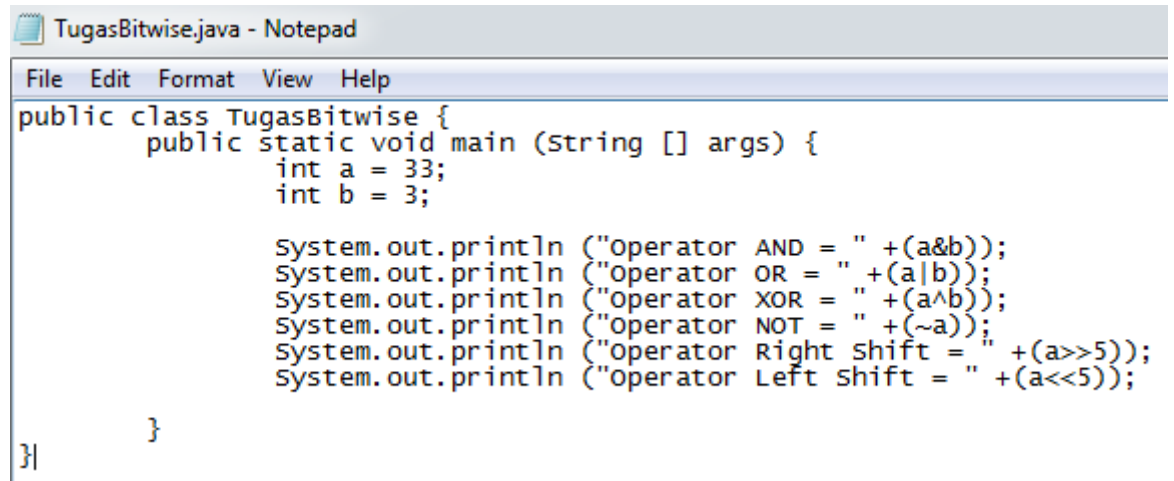
```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PB0
C:\PB0>javac TestMobil.java
C:\PB0>java TestMobil
Maju
Mundur
C:\PB0>
```

TUGAS

1. Modul 3

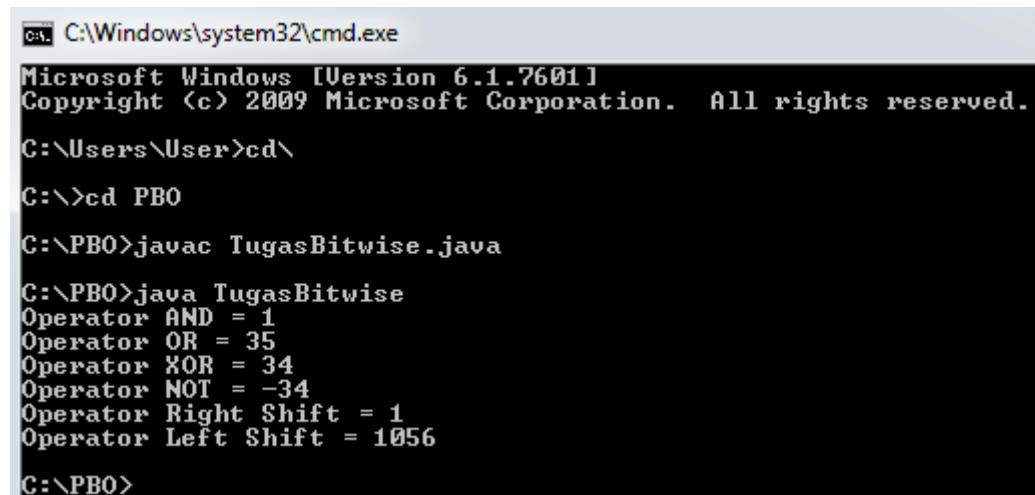
Source Code Bitwise



```
TugasBitwise.java - Notepad
File Edit Format View Help
public class TugasBitwise {
    public static void main (String [] args) {
        int a = 33;
        int b = 3;

        System.out.println ("Operator AND = " +(a&b));
        System.out.println ("Operator OR = " +(a|b));
        System.out.println ("Operator XOR = " +(a^b));
        System.out.println ("Operator NOT = " +(~a));
        System.out.println ("Operator Right Shift = " +(a>>5));
        System.out.println ("Operator Left Shift = " +(a<<5));
    }
}
```

Hasil

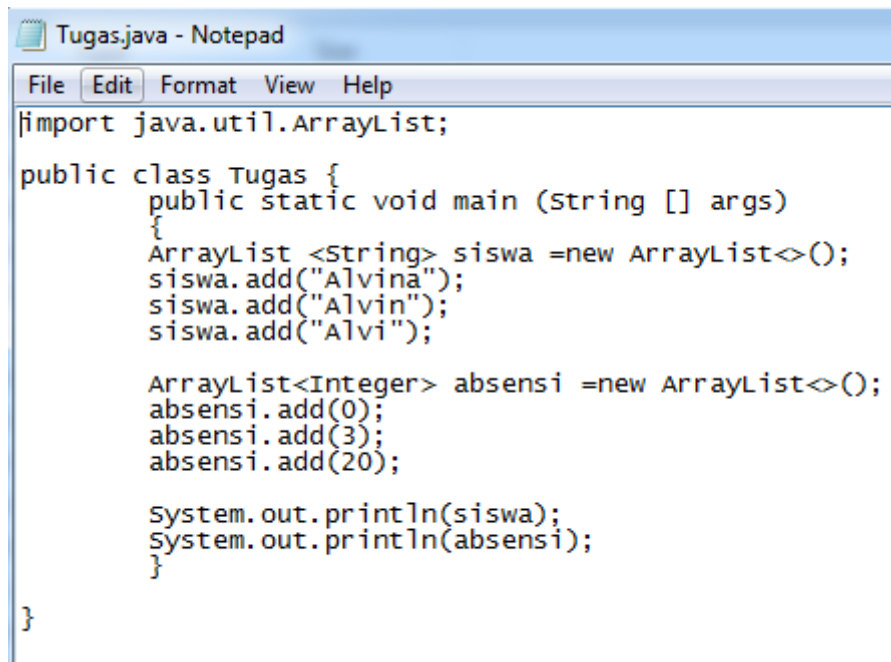


```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

G:\Users\User>cd\
G:\>cd PB0
G:\PB0>javac TugasBitwise.java
G:\PB0>java TugasBitwise
Operator AND = 1
Operator OR = 35
Operator XOR = 34
Operator NOT = -34
Operator Right Shift = 1
Operator Left Shift = 1056
G:\PB0>
```

2. Tugas Modul 5

Source Code ArrayList



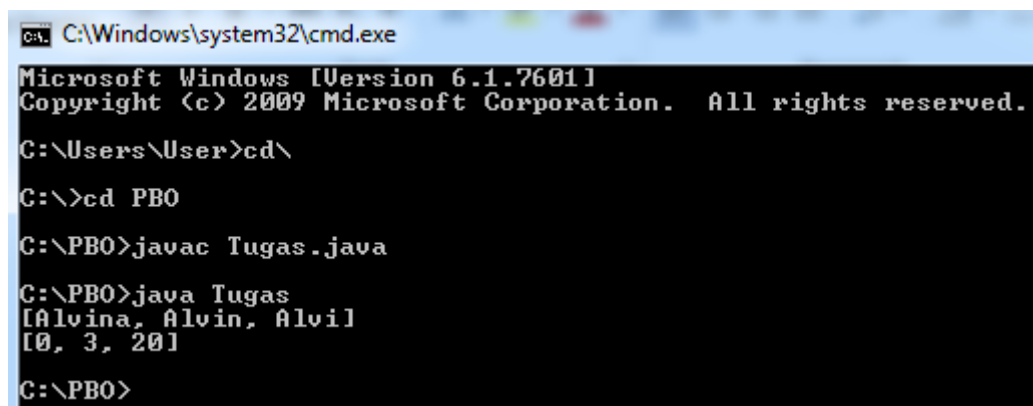
```
import java.util.ArrayList;

public class Tugas {
    public static void main (String [] args)
    {
        ArrayList <String> siswa =new ArrayList<>();
        siswa.add("Alvina");
        siswa.add("Alvin");
        siswa.add("Alvi");

        ArrayList<Integer> absensi =new ArrayList<>();
        absensi.add(0);
        absensi.add(3);
        absensi.add(20);

        system.out.println(siswa);
        system.out.println(absensi);
    }
}
```

Hasil



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\
C:\>cd PB0
C:\PB0>javac Tugas.java
C:\PB0>java Tugas
[Alvina, Alvin, Alvi]
[0, 3, 20]
C:\PB0>
```

3. Tugas Modul 6

Source Code Pesawat Tempur

```
PesawatTempur.java - Notepad
File Edit Format View Help
public class PesawatTempur {
    int mesin = 1;
    int body = 1;
    int roda = 3;
    int sayap = 2;

    void takeoff()
    {
        System.out.println ("Take off");
    }
    void landing()
    {
        System.out.println ("Landing");
    }
    void berhenti()
    {
        System.out.println ("Berhenti");
    }
    void menembak()
    {
        System.out.println ("Menembak");
    }

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

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

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

TestPesawatTempur.java - Notepad
File Edit Format View Help
public class TestPesawatTempur {
    public static void main (String [] args) {
        PesawatTempur TNI = new PesawatTempur ();
        TNI.tembak();
        TNI.landing();
    }
}
```

Hasil

cmd C:\Windows\system32\cmd.exe

Microsoft Windows [Version 6.1.7601]

Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\User>cd\

C:\>cd PB0

C:\PB0>javac TestPesawatTempur.java

C:\PB0>java TestPesawatTempur

Menembak

Landing

C:\PB0>