Laporan Asistensi

Tugas Pertama

1. Merubah tugas studi kasus dengan menggunakan metode inheritance!

Jawaban

Source Code

- **Class induk.java**

```
1. package main;
2. import java.util.Date;
3.
4. public class induk {
5.     public String nama, npm, nomor, password,
   kelas, hari, sesi, waktu, nip;
6.     public int indexdosen, indexkursus;
7.     public Date tanggalLahir;
8. }
```

- **Class listkursus.java**

```
1. package main;
2. public class listkursus {
3.     static String[] Kursus = {"Website", "Mechine
   learning", "Aplikasi"};
4. }
```

- **Class dosen.java**

```
1. package main;
2. import main.induk;
3.
4. public class dosen extends induk{
5.     public dosen(String nama, String nip){
6.         super.nama = nama;
7.         super.nip = nip;
8.     }
9.     public String getNama(){
10.         return nama;
11.     }
12.     public String getNip(){
13.         return nip;
14.     }
15. }
```

- **Class akun.java**

```
1. package main;
2. import main.induk;
3. import java.util.Date;
4.
5. public class akun extends induk{
6.     public akun(String nama, String npm, String
   nomor, String password, Date tanggalLahir, String
   kelas, String hari, String sesi, String waktu, int
   indexdosen, int indexkursus) {
7.         super.nama = nama;
8.         super.npm = npm;
9.         super.nomor = nomor;
10.          super.password = password;
11.          super.kelas = kelas;
12.          super.hari = hari;
13.          super.sesi = sesi;
14.          super.waktu = waktu;
15.          super.tanggalLahir = tanggalLahir;
16.          super.indexdosen = indexdosen;
17.          super.indexkursus = indexkursus;
18.     }
19.
20.     public String getNama() {
21.         return nama;
22.     }
23.
24.     public void setNama(String nama) {
25.         this.nama = nama;
26.     }
27.
28.     public String getNpm() {
29.         return npm;
30.     }
31.
32.     public void setNpm(String npm) {
33.         this.npm = npm;
34.     }
35.
36.     public String getNomor() {
37.         return nomor;
38.     }
39.
```

```
40.     public void setNomor(String nomor) {
41.         this.nomor = nomor;
42.     }
43.
44.     public String getPassword() {
45.         return password;
46.     }
47.
48.     public void setPassword(String password) {
49.         this.password = password;
50.     }
51.
52.     public String getKelas() {
53.         return kelas;
54.     }
55.
56.     public void setKelas(String kelas) {
57.         this.kelas = kelas;
58.     }
59.
60.     public String getHari() {
61.         return hari;
62.     }
63.
64.     public void setHari(String hari) {
65.         this.hari = hari;
66.     }
67.
68.     public String getSesi() {
69.         return sesi;
70.     }
71.
72.     public void setSesi(String sesi) {
73.         this.sesi = sesi;
74.     }
75.
76.     public String getWaktu() {
77.         return waktu;
78.     }
79.
80.     public void setWaktu(String waktu) {
81.         this.waktu = waktu;
82.     }
83.
84.     public Date getTanggalLahir() {
```

```
85.         return tanggalLahir;
86.     }
87.
88.     public void setTanggalLahir(Date
    tanggalLahir) {
89.         this.tanggalLahir = tanggalLahir;
90.     }
91.
92.     public int getIndexdosen() {
93.         return indexdosen;
94.     }
95.
96.     public void setIndexdosen(int indexdosen) {
97.         this.indexdosen = indexdosen;
98.     }
99.
100.    public int getIndexkursus() {
101.        return indexkursus;
102.    }
103.
104.    public void setIndexkursus(int indexkursus)
    {
105.        this.indexkursus = indexkursus;
106.    }
107.
108.
109. }
```

- **Class main.java**

```
1. package main;
2.
3. import java.util.ArrayList;
4. import java.text.SimpleDateFormat;
5. import java.util.Date;
6. import java.util.Scanner;
7.
8. public class main {
9.     static ArrayList<dosen> dataDosen = new
   ArrayList();
10.    static ArrayList<akun> dataAkun = new
   ArrayList();
11.    static Scanner in = new Scanner(System.in);
12.
```

```
13.     public static void main(String[]args){
14.         System.out.println("Selamat Datang di
    Program Kursus ITATS : ");
15.         int pil;
16.         dataDosen();
17.         do{
18.             System.out.println("Pilihan :");
19.             System.out.println("----------------
    ---------");
20.             System.out.println("1. Daftar akun
    ");
21.             System.out.println("2. Login ");
22.             System.out.println("3. exit");
23.             System.out.println("----------------
    ---------");
24.             System.out.print("Masukkan Pilihan :
    ");
25.             pil = in.nextInt();
26.             switch(pil){
27.                 case 1 :
28.                     daftar_akun();
29.                     break;
30.                 case 2 :
31.                     System.out.print("NPM : ");
32.                     String npm = in.next();
33.                     System.out.print("Password :
    ");
34.                     String password = in.next();
35.                     view(npm, password);
36.                     break;
37.                 case 3 :
38.
    System.out.println("Terimakasih telah mengunkungi
    program kami");
39.                     break;
40.             }
41.         }while(pil != 3);
42.     }
43.
44.     static void daftar_akun(){
45.         System.out.print("Nama : ");
46.         String nama = in.next();
47.         System.out.print("NPM : ");
48.         String npm = in.next();
49.         System.out.print("Nomor Handphone : ");
```

```
50.          String nomor = in.next();
51.          System.out.print("Password : ");
52.          String password  = in.next();
53.          System.out.print("Tanggal Lahir
   (mm/dd/yyyy) : ");
54.          Date tanggalLahir = new Date(in.next());
55.          System.out.print("Kelas : ");
56.          String kelas = in.next();
57.          System.out.print("Hari : ");
58.          String hari = in.next();
59.          System.out.print("Sesi : ");
60.          String sesi = in.next();
61.          System.out.print("Waktu : ");
62.          String waktu = in.next();
63.          System.out.println("------------------
   "); //pilih dosen
64.          System.out.println("List Dosen : ");
65.          System.out.println("------------------
   ");
66.          for(int i = 0; i < dataDosen.size();
   i++){
67.              System.out.println(i + "." +
   dataDosen.get(i).nama);
68.          }
69.          System.out.print("Pilih Dosen : ");
70.          int indexdosen = in.nextInt();
71.          System.out.println("------------------
   "); //pilih kursus
72.          System.out.println("List Kursus : ");
73.          System.out.println("------------------
   ");
74.          for(int i = 0; i <
   listkursus.Kursus.length; i++){
75.              System.out.println(i + "." +
   listkursus.Kursus[i]);
76.          }
77.          System.out.print("Pilih Kursus : ");
78.          int indexkursus =  in.nextInt();
79.          dataAkun.add(new akun(nama, npm, nomor,
   password, tanggalLahir, kelas, hari, sesi,
   waktu,indexdosen,indexkursus));
80.      }
81.
82.      static void view(String npm, String
   password) {
```

```
83.         for(int i = 0; i < dataAkun.size();
    i++){
84.
    if(npm.equals(dataAkun.get(i).getNpm()) &&
    password.equals(dataAkun.get(i).getPassword())){
85.                 System.out.println("------------
    --------------");
86.                 System.out.println("Data Diri  :
    ");
87.                 System.out.println("------------
    --------------");
88.                 System.out.println("Nama : " +
    dataAkun.get(i).getNama());
89.                 System.out.println("NPM : " +
    dataAkun.get(i).getNpm());
90.                 System.out.println("Tanggal
    Lahir : " + new SimpleDateFormat("dd-mm-
    yyyy").format(dataAkun.get(i).getTanggalLahir()));
91.                 System.out.println("Nomor
    Handphone : " + dataAkun.get(i).getNomor());
92.                 System.out.println("Kelas : " +
    dataAkun.get(i).getKelas());
93.                 System.out.println("Hari : " +
    dataAkun.get(i).getHari());
94.                 System.out.println("Sesi : " +
    dataAkun.get(i).getSesi());
95.                 System.out.println("Waktu : " +
    dataAkun.get(i).getWaktu());
96.                 System.out.println("Nama Dosen :
    " +
    dataDosen.get(dataAkun.get(i).indexdosen).getNama(
    ));
97.                 System.out.println("NIP Dosen :
    " + dataDosen.get(i).getNip());
98.                 System.out.println("Kursus :  "
    + listkursus.Kursus[dataAkun.get(i).indexkursus]);
99.                 System.out.println("------------
    ---------------");
100.            }else{
101.                System.out.println("NPM atau
    Password anda salah");
102.            }
103.        }
104.    }
105.
```

```
106.     static void dataDosen(){
107.         String nama[] = {"Farida", "Andy
   Rahcman", "Kurniawan"};
108.         String nip[] = {"01", "02", "03"};
109.         for(int i =0; i < nama.length; i++){
110.             dataDosen.add(new dosen(nama[i],
   nip[i]));
111.         }
112.     }
113. }
```

Output Program