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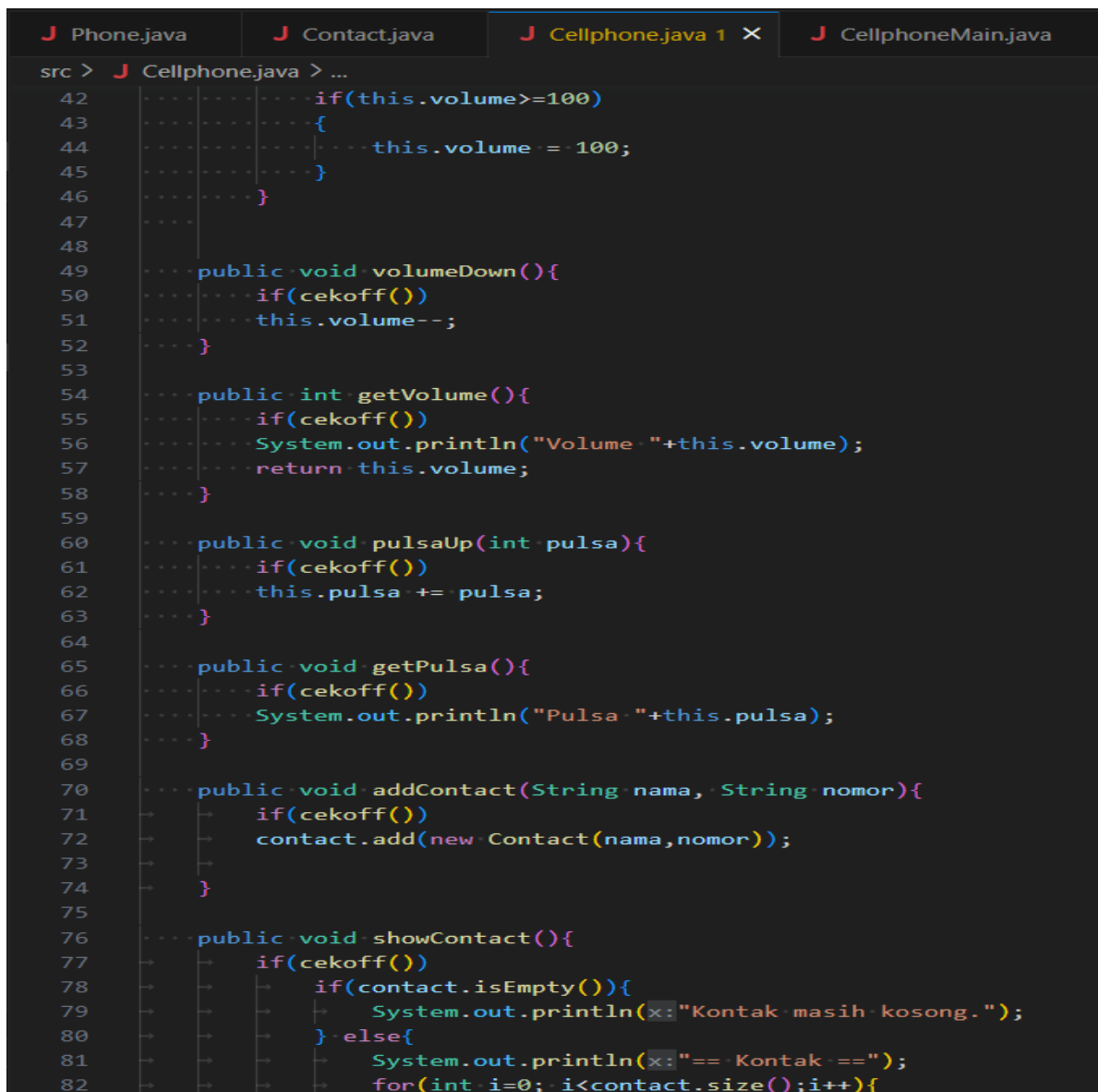
Praktikum 10

```
J Phone.java  J Contact.java  J Cellphone.java 1 X  J CellphoneMain.java
src > J Cellphone.java > ...
1  import java.lang.Math;
2  import java.util.ArrayList;
3
4  public class Cellphone implements Phone{
5      ArrayList<Contact> contact;
6      String merk;
7      String type;
8      int batteryLevel;
9      int status;
10     int volume = 0;
11     int pulsa;
12
13     public Cellphone(String merk,String type)
14     {
15         this.merk = merk;
16         this.type = type;
17         this.batteryLevel = (int)(Math.random()*(100-0+1)+0);
18         this.contact = new ArrayList<>();
19     }
20
21     public void powerOn(){
22         this.status = 1;
23         System.out.println(x:"Ponsel menyala");
24     }
25
26     public void powerOff(){
27         this.status = 0;
28         System.out.println(x:"Ponsel mati");
29     }
30
31     public boolean cekoff(){
32         if(this.status == 1){
33             return true;
34         }else{
35             System.out.println(x:"Ponsel mati. Tidak dapat menjalankan operasi apapun");
36             return false;
37         }
38     }
39     public void volumeUp(){
40         if(cekoff())
41             this.volume++;
```

Class Cellphone mengimplementasi interface Phone.

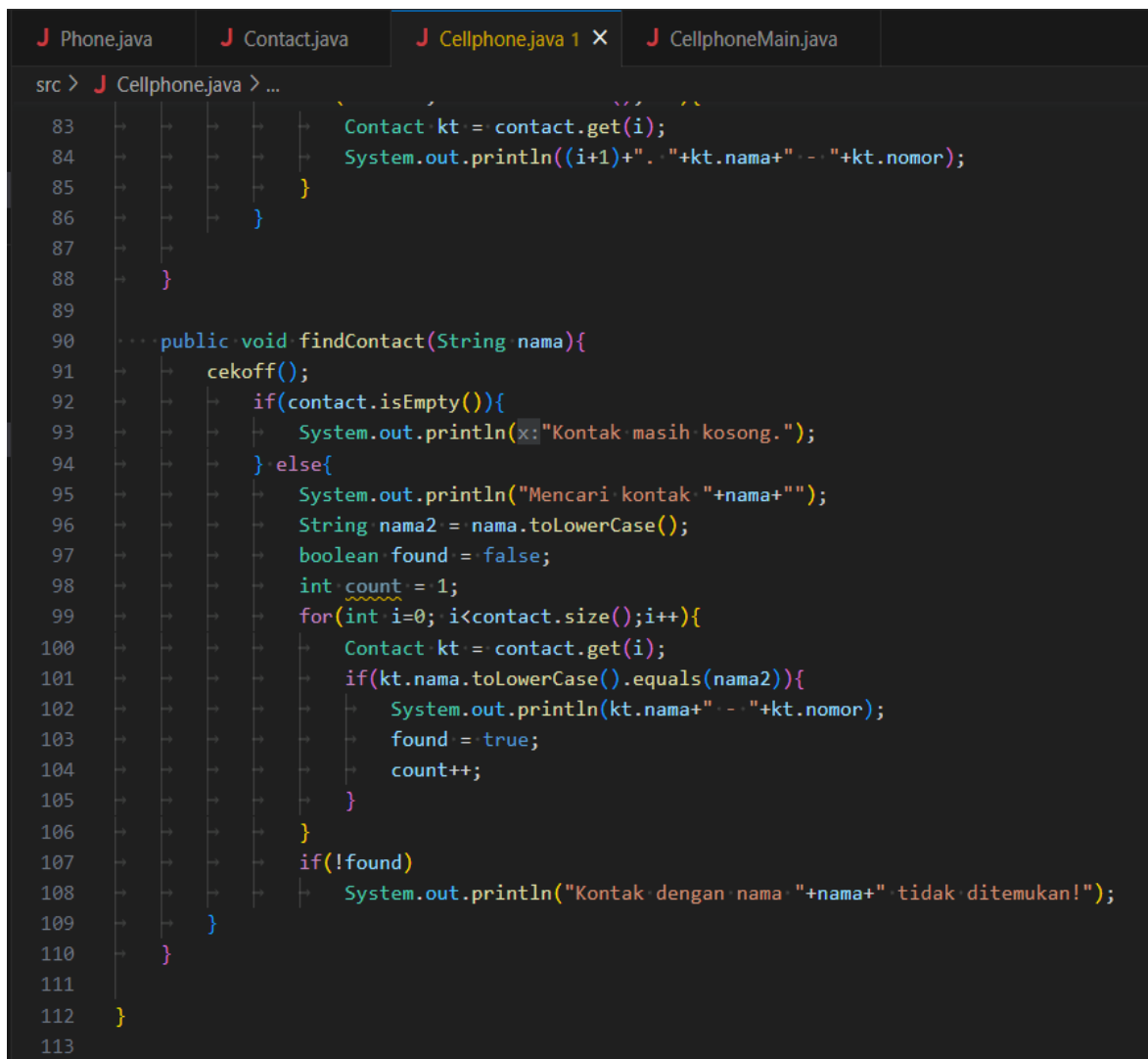
ada atribut contact, merk, type, batteryLevel, status, volume, plusa.

- Method powerOn : untuk menyalakan ponsel, dengan status menjadi 1
- Method powerOff : untuk mematikan ponsel, dengan status menjadi 0
- Method cekoff : untuk mengecek apakah ponsel kondisi hidup atau mati. Jika mati maka terdapat output penjelasan.
- Method Volumeup : cek dengan method cekoff lalu menambahkan volume.



```
src > Phone.java Contact.java Cellphone.java 1 X CellphoneMain.java
42  .... if(this.volume>=100)
43  .... {
44  ....     this.volume = 100;
45  .... }
46  .... }
47  ....
48  ....
49  .... public void volumeDown(){
50  ....     if(cekoff())
51  ....     this.volume--;
52  .... }
53  ....
54  .... public int getVolume(){
55  ....     if(cekoff())
56  ....     System.out.println("Volume "+this.volume);
57  ....     return this.volume;
58  .... }
59  ....
60  .... public void pulsaUp(int pulsa){
61  ....     if(cekoff())
62  ....     this.pulsa += pulsa;
63  .... }
64  ....
65  .... public void getPulsa(){
66  ....     if(cekoff())
67  ....     System.out.println("Pulsa "+this.pulsa);
68  .... }
69  ....
70  .... public void addContact(String nama, String nomor){
71  ....     if(cekoff())
72  ....     contact.add(new Contact(nama,nomor));
73  .... }
74  .... }
75  ....
76  .... public void showContact(){
77  ....     if(cekoff())
78  ....     if(contact.isEmpty()){
79  ....         System.out.println(x:"Kontak masih kosong.");
80  ....     } else{
81  ....         System.out.println(x:"== Kontak ==");
82  ....         for(int i=0; i<contact.size();i++){
```

- Method Volumedown : cek dengan method cekoff lalu mengurangi volume.
- Method Getvolume : cek dengan method cekoff lalu mengambil dan menampilkan data volume.
- Method pulsaup : menambahkan pulsa.
- Method getpulsa : untuk melihat sisa pulsa.
- Method addcontact : menambahkan parameter berupa nama dan nomor yang berguna untuk menambah object baru pada ArrayList contact.
- Method showcontact : menampilkan semua kontak yang ada pada ponsel.

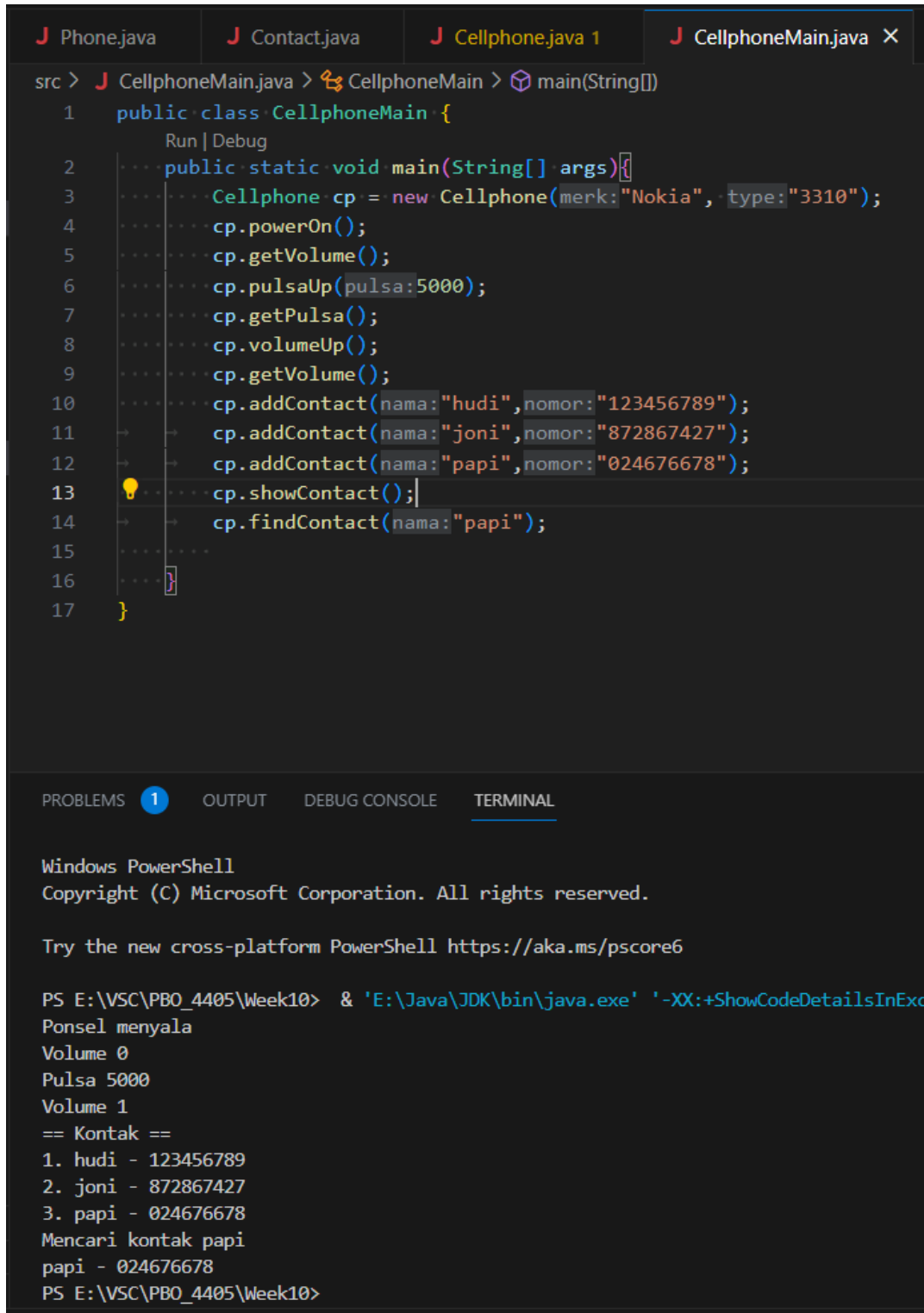


```

src > J Phone.java J Contact.java J Cellphone.java 1 X J CellphoneMain.java
83         Contact kt = contact.get(i);
84         System.out.println((i+1)+" "+kt.nama+" -- "+kt.nomor);
85     }
86 }
87
88 }
89
90 ... public void findContact(String nama){
91     cekoff();
92     if(contact.isEmpty()){
93         System.out.println("Kontak masih kosong.");
94     } else{
95         System.out.println("Mencari kontak "+nama+"");
96         String nama2 = nama.toLowerCase();
97         boolean found = false;
98         int count = 1;
99         for(int i=0; i<contact.size();i++){
100             Contact kt = contact.get(i);
101             if(kt.nama.toLowerCase().equals(nama2)){
102                 System.out.println(kt.nama+" -- "+kt.nomor);
103                 found = true;
104                 count++;
105             }
106         }
107         if(!found)
108             System.out.println("Kontak dengan nama "+nama+" tidak ditemukan!");
109     }
110 }
111
112 }
113

```

- Method findContact : untuk mencari parameter nama yang sesuai dan menampilkan nya berupa nama dan nomor.



```
src > J CellphoneMain.java > CellphoneMain > main(String[])
1 public class CellphoneMain {
    Run | Debug
2     public static void main(String[] args) {
3         Cellphone cp = new Cellphone(merk: "Nokia", type: "3310");
4         cp.powerOn();
5         cp.getVolume();
6         cp.pulsaUp(pulsa: 5000);
7         cp.getPulsa();
8         cp.volumeUp();
9         cp.getVolume();
10        cp.addContact(nama: "hudi", nomor: "123456789");
11        cp.addContact(nama: "joni", nomor: "872867427");
12        cp.addContact(nama: "papi", nomor: "024676678");
13        cp.showContact();
14        cp.findContact(nama: "papi");
15
16    }
17 }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL

Windows PowerShell
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Try the new cross-platform PowerShell <https://aka.ms/pscore6>

```
PS E:\VSC\PBO_4405\Week10> & 'E:\Java\JDK\bin\java.exe' '-XX:+ShowCodeDetailsInExc
Ponsel menyala
Volume 0
Pulsa 5000
Volume 1
== Kontak ==
1. hudi - 123456789
2. joni - 872867427
3. papi - 024676678
Mencari kontak papi
papi - 024676678
PS E:\VSC\PBO_4405\Week10>
```