

M. IBNU LUTHFI AZHAR

200401067

TI-B2

Tugas: encapsulation

```
1 package com.company;
2
3 class Vaccine {
4     public String name;
5     public String address;
6
7     private String nik;
8     private String vaccineSchedule;
9
10    private String vaccineName;
11    private int vaccineEfficacy;
12
13    void Print(){
14        System.out.println("Pekanbaru Vaccination Data");
15    }
16
17    public void setNik(String nik) {
18        this.nik = nik;
19    }
20
21    public void setVaccineSchedule(String vaccineSchedule) {
22        this.vaccineSchedule = vaccineSchedule;
23    }
24
25    public String getNik() {
26        return nik;
27    }
28
29    public String getVaccineSchedule() {
30        return vaccineSchedule;
31    }
32
33    public void setVaccineName(String vaccineName) {
34        this.vaccineName = vaccineName;
35    }
36
37    public String getVaccineName() {
38        return vaccineName;
39    }
40
41    public void setVaccineEfficacy(int vaccineEfficacy) {
42        this.vaccineEfficacy = vaccineEfficacy;
43    }
44
```

```

45     public String getVaccineEfficacy() {
46         return vaccineEfficacy + "%";
47     }
48 }
49
50 class MadaniHospital extends Vaccine {
51     String roomNumber;
52
53     void Print(){
54         System.out.println("-----");
55         System.out.println("NIK: " + getNik());
56         System.out.println("Name: " + name);
57         System.out.println("Address: " + address);
58
59         System.out.println("Room Number: " + roomNumber);
60         System.out.println("Vaccine Schedule: " + getVaccineSchedule());
61         System.out.println("Vaccine Name: " + getVaccineName());
62         System.out.println("Vaccine Efficacy: " + getVaccineEfficacy());
63     }
64 }
65
66 class EkaHospital extends Vaccine {
67     EkaHospital(){
68         setVaccineName("Moderna");
69         setVaccineSchedule("3");
70         setVaccineEfficacy(100);
71     }
72
73     void Print(){
74         System.out.println("-----");
75         System.out.println("NIK: " + getNik());
76         System.out.println("Name: " + name);
77         System.out.println("Address: " + address);
78         System.out.println("Vaccine Schedule: " + getVaccineSchedule());
79         System.out.println("Vaccine Name: " + getVaccineName());
80         System.out.println("Vaccine Efficacy: " + getVaccineEfficacy());
81     }
82 }
83
84 public class Main {
85
86     public static void main(String[] args) {
87         MadaniHospital madani = new MadaniHospital();
88         madani.setNik("111111");
89         madani.name = "M. IBNU LUTHFI AZHAR";
90         madani.address = "Jalan Surya";
91         madani.setVaccineName("Pfizer");
92         madani.setVaccineSchedule("3");
93         madani.setVaccineEfficacy(98);
94         madani.Print();
95
96         EkaHospital eka = new EkaHospital();
97         eka.setNik("222222");
98         eka.name = "LOREM IPSUM";
99         eka.address = "Jalan Dolor";
100        eka.Print();
101    }
102 }
103

```

Hasil output

```
Run: Main x
/Users/ibnuh/Library/Java/JavaVirtualMachines/openjdk-17.0.1/Conten
-----
NIK: 111111
Name: M. IBNU LUTHFI AZHAR
Address: Jalan Surya
Room Number: null
Vaccine Schedule: 3
Vaccine Name: Pfizer
Vaccine Efficacy: 98%
-----
NIK: 222222
Name: LOREM IPSUM
Address: Jalan Dolor
Vaccine Schedule: 3
Vaccine Name: Moderna
Vaccine Efficacy: 100%

Process finished with exit code 0
```