```java
package problem6;

import java.util.*;

class Patient {
    // Data members
    private static int lastId = 0;
    private String name;
    private int id;
    private ArrayList<Readings> record;
    private int docid;
    private String docname;
    private int status;

    // Constructor
    public Patient(String name, int did, String dname) {
        this.name = name;
        id = 10000 + lastId++;
        docid = did;
        docname = dname;
        record = new ArrayList<>();
        status = 1;
    }

    // Function to assign a doctor
    public void assignDoctor(int did, String n) {
        docid = did;
        docname = new String(n);
    }

    // Function to set bp and temp
    public void setRecord(Readings r) {
        record.add(r);
    }

    // Function to check if a patient is still in hospital
    public boolean isChecked() {
        return status == 1;
    }

    // Function to check out a patient
    public void checkOut() {
        status = 0;
    }

    // Function to get id
    public int getId() {
        return id;
    }

    // Function to get docid
    public int getDocId() {
        return docid;
    }

    // Function to display
    public void display() {
        System.out.println("Id: " + id + "\nName: " + name);
        if (docid == 0)
            System.out.println("Assigned to: None");
        else
            System.out.println("Assigned to: " + docname);
```

```java
63    }
64
65    // Function to show all readings
66    public void showReadings() {
67        System.out.println("Taken by: " + docname);
68        System.out.println("-------------------------------------------");
69        for (Readings r : record) {
70            System.out.println(r);
71            System.out.println("-------------------------------------------");
72        }
73    }
74 }
```