2.

Develop a Java program to create a classPatient with data members pt_id, pt_name, pt_age, doc.

The program should include the following functionalities.

Accept

n patient details.

Accept

a patient id and display his/her details.

Accept

the name of the doctor and display the names of all the patients treated by him/her.

CODE:

```java
import java.util.Scanner;
class Patient
{
    Scanner ss = new Scanner(System.in);
    int pt_id;
    String pt_name = new String();
    int pt_age;
    String doc = new String();

    Patient()
    {}

    void setd()
    {
        System.out.println("enter patient id");
        pt_id = ss.nextInt();
        System.out.println("enter patient name");
        pt_name = ss.next();
        System.out.println("enter patient age");
        pt_age = ss.nextInt();
        System.out.println("enter doctor name");
```

```java
        doc = ss.next();


    }

    private void disp()
    {
        System.out.println("Patient details are :");
        System.out.println(" NAME :" + this.pt_name);
        System.out.println(" AGE :" + this.pt_age);
        System.out.println("ID   :" + this.pt_id);
        System.out.println("DOC   :" + this.doc);
    }

    private void dispName() {
        System.out.println(" NAME :" + this.pt_name);
    }

    void dispPatientDetailsWithPatientId(int pid)
    {
        if (pid == this.pt_id) {
            this.disp();
        }
    }

    void dispPatientDetailsWithDocInfo(String docName)
    {
        if (this.doc.equals(docName)) {
            this.dispName();
        }
    }
}

class PatientMain
{
    public static void main(String[] args)
    {
        int n;
        Scanner ss = new Scanner(System.in);
        System.out.println("enter number of patients");
        n = ss.nextInt();
        Patient p[] = new Patient[n];
        for(int i=0;i<n;i++)
        {
            p[i] = new Patient();
            p[i].setd();
        }

        System.out.println("Enter a patient ID to be displayed");
```

```java
        int pid = ss.nextInt();
        for(int i=0;i<n;i++)
        {
            p[i].dispPatientDetailsWithPatientId(pid);
        }

        System.out.println("Enter a Doc Name to be queried");
        String docName = ss.next();
        for(int i=0;i<n;i++)
        {
            p[i].dispPatientDetailsWithDocInfo(docName);
        }
    }

}
```

OUTPUT:

```
C:\Users\Anagha\Desktop\OOJ\Lab6>javac PatientMain.java

C:\Users\Anagha\Desktop\OOJ\Lab6>java PatientMain
enter number of patients
2
enter patient id
1
enter patient name
Mary
enter patient age
45
enter doctor name
Josh
enter patient id
2
enter patient name
Joe
enter patient age
50
enter doctor name
Josh
Enter a patient ID to be displayed
2

Patient details are :
 NAME :Joe
 AGE :50
ID   :2
DOC   :Josh
Enter a Doc Name to be queried
Josh
 NAME :Mary
 NAME :Joe
```