Program 1: Books

```java
import java.util.*;
class Book
{
        String author;
        String name;
        double price;
        int num_pages;
        Scanner in = new Scanner(System.in);
        Book()
        {
                this.author = author;
                this.name = name;
                this.price = price;
                this.num_pages = num_pages;
        }
        void getDetails()
        {

                System.out.println("Enter the name of the book");
                name = in.nextLine();
                System.out.println("Enter the name of the author ");
                author = in.next();
                System.out.println("Enter the price in Rs.");
                price = in.nextDouble();
                System.out.println("Enter the no of pages");
                num_pages = in.nextInt();


        }
        public String toString()
        {


                return("AUTHOR : "+author+"\nNAME: "+name+"\nPRICE in Rs."+price+"\nNo
of pages: "+num_pages);
        }
}
class BookMain
{
        public static void main(String args[])
        {
                int n;
                Scanner in = new Scanner(System.in);
                System.out.println("Enter the number of books");
                n = in.nextInt();
                Book bk[] = new Book[n];
                for(int i = 0;i<n;i++)
                {
                        System.out.println("Enter the details of BOOK "+(i+1));
                        bk[i] = new Book();
                        bk[i].getDetails();
                }
                System.out.println("-------------");
                System.out.println("Details of the books entered:");
```

```java
            for(int i = 0;i<n;i++)
            {
                    System.out.println("BOOK "+(i+1)+" : ");
                    System.out.println(bk[i]);
            }

        }
}
```

OUTPUT:

```
Enter the number of books
3
Enter the details of BOOK 1
Enter the name of the book
PROBLEMS PLUS IN IIT MATH
Enter the name of the author
ASITDASGUPTA
Enter the price in Rs.
400
Enter the no of pages
850
Enter the details of BOOK 2
Enter the name of the book
PROBLEMS IN GENERAL PHYSICS
Enter the name of the author
IEIRODOV
Enter the price in Rs.
50
Enter the no of pages
150
Enter the details of BOOK 3
Enter the name of the book
VAMSHAVRUKSHA
Enter the name of the author
SLBHYRAPPA
Enter the price in Rs.
300
Enter the no of pages
550
-------------
Details of the books entered:
BOOK 1 :
AUTHOR : ASITDASGUPTA
NAME: PROBLEMS PLUS IN IIT MATH
PRICE in Rs.400.0
No of pages: 850
BOOK 2 :
AUTHOR : IEIRODOV
NAME: PROBLEMS IN GENERAL PHYSICS
PRICE in Rs.50.0
No of pages: 150
BOOK 3 :
AUTHOR : SLBHYRAPPA
NAME: VAMSHAVRUKSHA
PRICE in Rs.300.0
No of pages: 550
```

Program 2: Employee

```java
import java.util.*;
class Employee
{
        public static double empgross;
        public static String empname;
        public static String empid;
        public static double da;
        public static double hra;
        public static double it;
        public static double basic;
        public static int toth;
        public static int oth;
```

```java
        Scanner in = new Scanner(System.in);
        void accept()
        {
                System.out.println("Enter details");
                System.out.println("Name: ");
                empname = in.next();
                System.out.println("ID:");
                empid = in.next();
                System.out.println("Basic salary in Rs.");
                basic = in.nextDouble();
                System.out.println("DA HRA and IT in %");
                da = in.nextDouble();
                hra = in.nextDouble();
                it = in.nextDouble();
                System.out.println("Enter the total no of hours worked including OT");
                toth = in.nextInt();
                System.out.println("OT hours");
                oth = in.nextInt();
        }
        void gross()
        {
                empgross = basic * (da + hra - it + 100)/100;
        }
        void calculation()
        {
                empgross = empgross + (oth * 100);
                if(toth>=200)
                {
                        empgross = empgross + ((toth - 200)*100);
                }
                else
                {
                        empgross = empgross - ((200 - toth)*100);
                }
                display();
        }
        void display()
        {
                System.out.println("Name: "+empname);
                System.out.println("Gross Salary: Rs."+empgross);
        }
}
class EmpMain
{
        public static void main(String []args)
        {
                Employee e1 = new Employee();
                e1.accept();
                e1.gross();
                e1.calculation();
        }
}
```

OUTPUT:

```
Enter details
Name:
ANIRUDH
ID:
234
Basic salary in Rs.
90000
DA HRA and IT in %
2 5 9
Enter the total no of hours worked including OT
250
OT hours
40
Name: ANIRUDH
Gross Salary: Rs.97200.0
```

PROGRAM 3: AGE

```java
/*
 * Copyright 2020 Kiran M K
 */
import java.util.*;
class Age
{
        public String name;
        public int years;
        public int months;
        Scanner in = new Scanner(System.in);
        void accept()
        {
                System.out.println("Enter name");
                name = in.nextLine();
                System.out.println("Enter the age in years and months");
                years = in.nextInt();
                months = in.nextInt();
                System.out.println("----------------");
        }
}
class AgeMain
{
        public static void main(String args[])
        {
        Age p1 = new Age();
        Age p2 = new Age();
        p1.accept();
        p2.accept();


        if(p1.years>p2.years)
                System.out.println(p1.name+" is elder than "+p2.name);
        else if(p1.years == p2.years)
        {
                if(p1.months > p2.months)
```

```java
                System.out.println(p1.name+" is elder than "+p2.name);
        else if(p1.months == p2.months)
                System.out.println(p1.name +" and "+p2.name+" are of same age");
        else
                System.out.println(p2.name+" is elder than "+p1.name);
    }
    else
        System.out.println(p2.name+" is elder than "+p1.name);
    }

}
```

OUTPUT:

```
Enter name
DR.SWAMY
Enter the age in years and months
81 1
----------------
Enter name
NARENDRA MODI
Enter the age in years and months
68 1
----------------
DR.SWAMY is elder than NARENDRA MODI
```