Lab program2--Create a class Book which contains four members: name, author, price,
num_pages. Include a constructor to set the values for the members. Include
methods to set and get the details of the objects. Include a toString( ) method
that could display the complete details of the book. Develop a Java program
to create n book objects.

```java
import java.util.Scanner;
class Student
{
 String name,usn;
 int credits[]= new int[20],marks[]= new int[20],gradepoints[]= new int[20],n,nume=0,denom=0;
 double sgpa;
 void accept()
 {
   Scanner s=new Scanner(System.in);
   System.out.println("enter student name ,usn");
   name=s.next();
   usn=s.next();
    System.out.println("enter the number of subjects");
   n=s.nextInt();
  for(int i=0;i<n;i++)
  {
    System.out.println("enter subject"+(i+1)+"marks");
    marks[i]=s.nextInt();
    System.out.println("enter subject"+(i+1)+"credits");
    credits[i]=s.nextInt();
    denom+=credits[i];
  }
 }
  void calculate()
    {
       for(int i=0;i<n;i++)
         {
             if(marks[i]>=90)
              gradepoints[i]=10;
             else if(marks[i]>=80 && marks[i]<90)
              gradepoints[i]=9;
             else if(marks[i]>=70 && marks[i]<80)
              gradepoints[i]=8;
             else if(marks[i]>=60 && marks[i]<70)
              gradepoints[i]=7;
             else if(marks[i]>=50 && marks[i]<60)
              gradepoints[i]=6;
             else if(marks[i]>=40 && marks[i]<50)
              gradepoints[i]=4;
             else
              gradepoints[i]=0;
            nume+=credits[i]*gradepoints[i];
         }
       sgpa=nume/denom;
    }
  void display()
     {
```

Lab program2--Create a class Book which contains four members: name, author, price,
num_pages. Include a constructor to set the values for the members. Include
methods to set and get the details of the objects. Include a toString( ) method
that could display the complete details of the book. Develop a Java program
to create n book objects.

```java
        System.out.println("Student_details");
        System.out.println("name :"+name+"\n"+"usn :"+usn+"\n");
        System.out.println("marks and grade");
        for(int i=0;i<n;i++)
          {
             System.out.println(marks[i]+"\t"+gradepoints[i]);
             System.out.println();
          }
        System.out.println("SGPA :" +sgpa);
      }
}
 class Studentdemo
   {
     public static void main(String args[])
        {
           Student s=new Student();
           s.accept();
           s.calculate();
           s.display();
        }
    }
```

Lab program2--Create a class Book which contains four members: name, author, price,
num_pages. Include a constructor to set the values for the members. Include
methods to set and get the details of the objects. Include a toString( ) method
that could display the complete details of the book. Develop a Java program
to create n book objects.

Lab Program - 3

Date _____
Page _____

```java
import java.util.Scanner;
class Book{
    int num_pages;
    double price;
    String name;
    String author;
    Book() {
        num_pages = 0;
        price = 0.0;
        name = "some_book";
        author = "gagandeep";
    }
    Book (int num_pages, double price, String name,
            String author) {
        this.num_pages = num_pages;
        this.price = price;
        this.name = name;
        this.author = author;
    }
    void get_data()
    {
        System.out.println("Book details \n name : "+
                name+ "\n author \n
        number of pages : "+num_pages +
            "\n price :" + price);
```

Lab program2--Create a class Book which contains four members: name, author, price,
num_pages. Include a constructor to set the values for the members. Include
methods to set and get the details of the objects. Include a toString( ) method
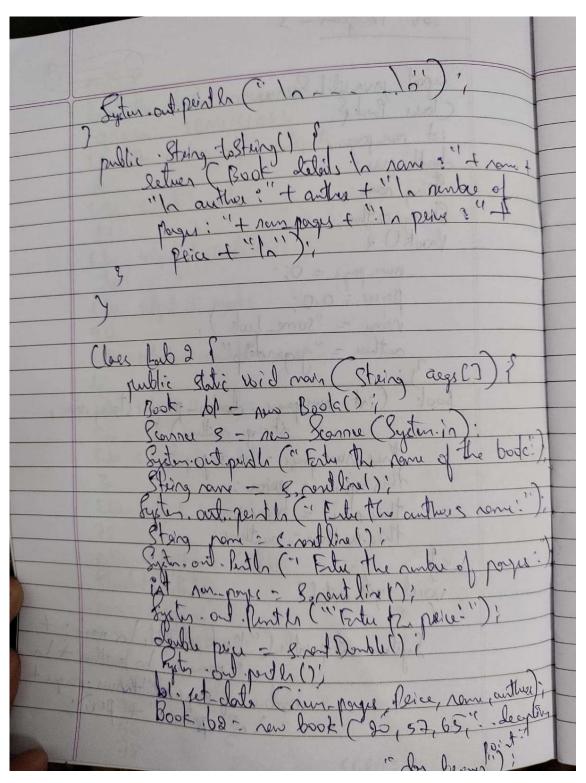that could display the complete details of the book. Develop a Java program
to create n book objects.

```java
        System.out.println(" \n--------\n");
    }

    public String toString() {
        return ("Book details \n name : "+ name +
        "\n author :" + author + "\n number of
        pages : "+ num_pages + "\n price : "+
        price + "\n");
    }

}

class Lab2 {
    public static void main(String args[]) {
        Book b1 = new Book();
        Scanner s = new Scanner(System.in);
        System.out.println(" Enter the name of the book");
        String name = s.nextline();
        System.out.println(" Enter the authors name");
        String name = s.nextline();
        System.out.println(" Enter the number of pages");
        int num_pages = s.nextline();
        System.out.println(" Enter the price");
        double price = s.nextDouble();
        System.out.println();
        b1.set_data(num_pages, price, name, author);
        Book b2 = new book(25, 57, 65, ".deep...
        " for (i....
```

Lab program2--Create a class Book which contains four members: name, author, price,
num_pages. Include a constructor to set the values for the members. Include
methods to set and get the details of the objects. Include a toString( ) method
that could display the complete details of the book. Develop a Java program
to create n book objects.

```
        b1.get_data();
        b2.get_data();
        System.out.println(b1);
        System.out.println(b2);
        S.close();
    }
}
```

Output

Enter the name of book: harey pother
enter the author name : J.K. Rowling
enter the number of pages : 500
enter the price : 450
Book details
    name : Harry potter
    author : J K Rowling
    number of pages = 500
    price = 450

Neelima
2 Book details
    name : deuption point
    author : dan beown
    number of pages : 20
    price : 87.65