details of object. Include a tostring() method that could display the complete details of book. Develop a java program to create n book objects.

Date
Page

Program-3 (create a class book which contains name author price num_pages. Include a constructor to set the values for members. Include method to set & get the

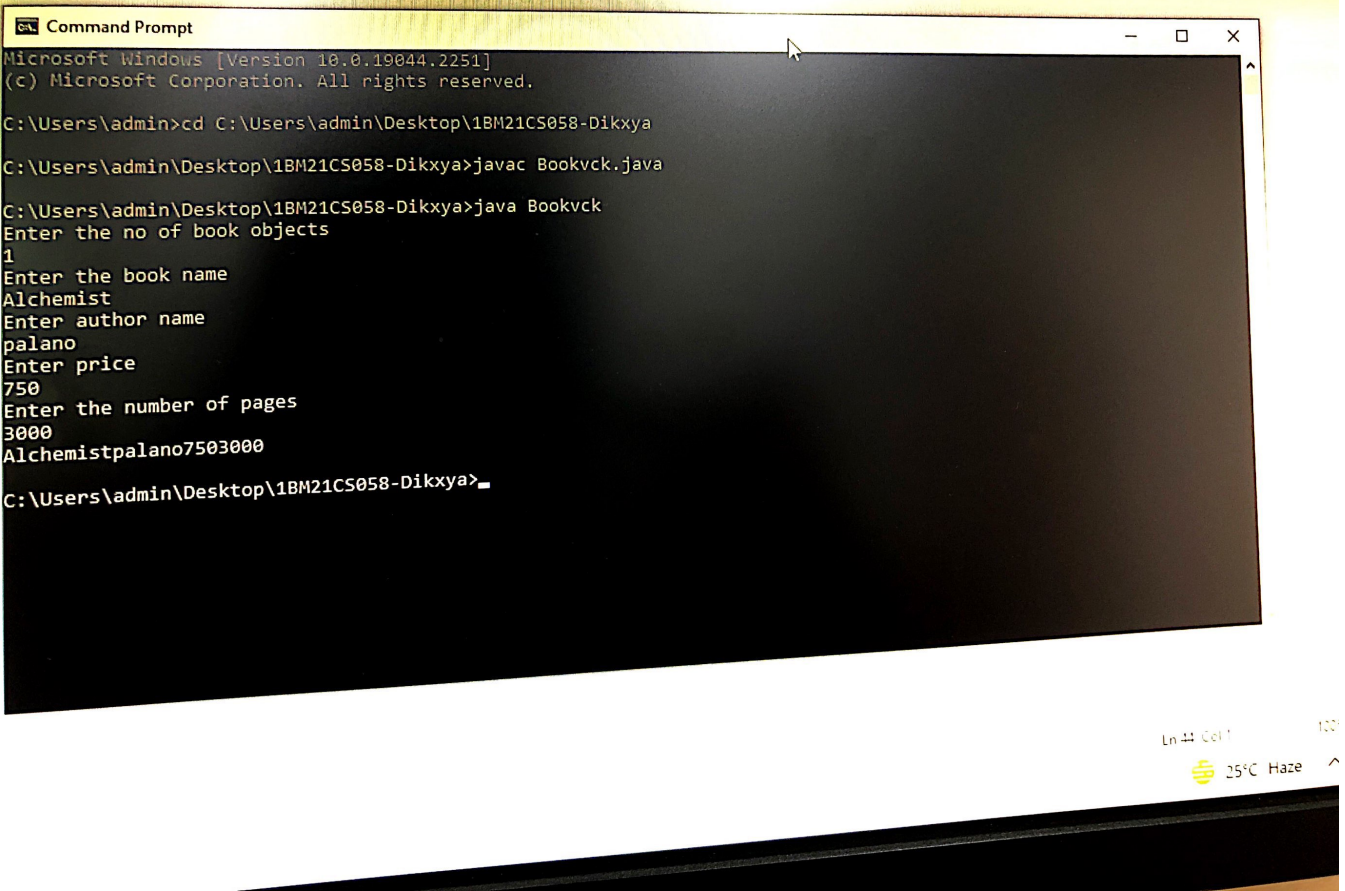
```
import java.util.*;
import java.lang.*;
class Book
{
String name, author, int price, num_pages;
void getval()
{
scanner sc = new scanner (system.in);
system.out.println ("Enter the book name");
name = sc.next();
system.out.println (" Enter author name ");
author = sc.next();
system.out.println ("Enter price");
Price = sc.next Int();
System.out.print ln("Enter No. of pages");
num_pages = sc.next Int();
}
public string to string()
{
return name + " " + author + " " + price + " " +
num_pages + " ";
}
void display (Book o)
{
system.out.println(o);
}
}
class Bookvck
{
```

```
public static void main (String args[])
{
Scanner in = new Scanner (System.in);
System.out.println ("Enter the no. of book objects");
int n = in.nextInt();
Book [] ob = new Book[n];
for (int i=0; i<n; i++)
ob [i] = new Book();
for (int i=0; i<n; i++)
{ ob[i].getval(); }
for (int i=0; i<n; i++)
{ ob[i].display(ob[i]); }
}
}
```

Output.

```
Enter the no. of book objects
1
Enter the book name
Alchemist
Enter the author name
Palano
Enter price
750
Enter the number of pages
3000
Alchemist palano 750 3000
```

Reading 2/12/2022



details and a method to calculate SGPA of a student.

Program-2

Develop a Java program to create a class student with members usn, name an array credits and an array marks. Include methods to accept and display

```
import java.util.Scanner;
class student {
void display (String name, String usn)
{
System.out.println("USN of the student"+usn);
System.out.println("Name of the student"+name);
}
void calculatesgpa(double[] marks, double[] credits,
int number)
{
double gradepoints[] = new double[number];
double sgpa, sum=0, tnum=0;
for(int i=0; i<number; i++)
{
if (marks[i]>=90)
gradepoints[i] = 10;
else if (marks[i]>=80)
gradepoints[i] = 9;
else if (marks[i]>=70)
gradepoint[i]=8;
else if (marks[i]>=60)
gradepoints[i] = 7;
else if (marks[i]>=50)
gradepoints[i] = 6;
else if (marks[i]>=40)
gradepoints[i]=4;
else
gradepoints[i] = 0;
```

```
}
for(int i=0;i<numbe;i++)
{
sum+ = credits[i] * gradepoints[i];
}
for(int i=0;i<number;i++)
{
tnum+ = credits[i];
}
sgpa = sum/tnum;
System.out.println("SGPA is" +sgpa);
}
}
class sgpa {
public static void main(String args[]){
Scanner s = new Scanner(System.in);
System.out.println("Enter name and usn of student");
String name = s.next();
String usn = s.next();
Student S1 = new Student();
System.out.println("Enter the number of courses");
int number = s.nextInt();
double credits[] = new double[number];
double marks[] = new double[number];
for(int i=0;i<number;i++)
{
System.out.print("credit of subject"+(i+1)+":");
credits[i] = s.nextDouble();
System.out.print("Marks of subject "+(i+1)+":");
marks[i] = s.nextDouble();
}
S1.display(name, usn);
```

Sl. calculatesgpa(marks, credits, number);
}
}

Output.
Enter name and usn of students
Dikshya 1BM21CS058

Enter the number of courses
4
credits of subject 1: 4
Mark of subject 1: 82
credit of subject 2: 3
Mark of subject 2: 79
credit of subject 3: 3
Mark of subject 3: 87
credit of subject 4: 4
Marks of subject 4: 66

USN of the student 1BM21CS058
Name of the student Dikshya
SGPA is 8.214285.

Akshaya
21/12/2022

```
er;i++)


80)

=70)


=60)


>=50)
;

>=40)
;

);

umber;i++)

*gradepoints[i];

number;i++)

i];


intln("SGPA is"+sgpa);


 void main(String args[]){
 Scanner(System.in);
rintln("Enter name and usn of students ");
s.next();
.next();
ew Student();
rintln("Enter the number of courses");
s.nextInt();
its[]=new double[number];
```