1. Write a Java program to create a class student with members USN, name, marks (6 subjects). Include methods to accept student details and marks, Also include a method to calculate the percentage and display appropriate details. (Array of students object to be created).

```
import java.util.Scanner;

class Student {
    String USN;
    String name;
    int[] marks = new int[6];

    void acceptDetails() {
        Scanner scanner = new Scanner(System.in);
        System.out.println("Enter USN: ");
        USN = scanner.next();
        System.out.println("Enter Name: ");
        name = scanner.next();
        System.out.println("Enter marks from 6 subjects: ");
        for (int i=0; i<6; i++) {
            System.out.println("subject" + (i+1) + ":");
            marks[i] = scanner.nextInt();
        }
    }

    double calculatePercentage() {
        int totalMarks = 0;
        for (int marks : marks) {
            totalMarks += mark;
        }
        return (double) totalMarks / 6;
    }
}
```

```java
void displayDetails() {
    System.out.println("Student details:");
    System.out.println("USN: " + USN);
    System.out.println("Name: " + name);
    System.out.println("Percentage: " + calculatePercentage() + "%");
}
}

Public class exp {
    public static void main(String [] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter the number of students: ");
        int numStudents = scanner.nextInt();

        student [] students = new student [numStudents];

        for (i=0; i < numStudents; i++) {
            students [i] = new student();
            System.out.println("\n Enter details for student " + (i+1) + ":");
            students [i].acceptDetails();

            System.out.println("\n Details of all students:");
            for (student student: students) {
                student.displayDetails();
                System.out.println();
            }
        }
    }
)
```

Output:

    Enter the number of students: 2

    Enter details for student 1:
    Enter USN: 2023BMS01
    Enter name: Syed.
    Enter marks for 6 subjects:
    Subject 1: 80
    Subject 2: 90
    Subject 3: 90
    subject 4: 90
    Subject 5: 90
    Subject 6: 90

    Enter details for student 2:
    Enter USN: 2023BMS02
    Enter name: Farhan.
    Enter marks for 6 subjects:
    Subject 1: 90
    Subject 2: 90
    subject 3: 90
    Subject 4: 90
    Subject 5: 90
    subject 6: 90

    Details of all students:
    Student details.   student details:
    USN: 2023BMS01   USN: 2023BMS02
    Name: Syed.   Name: Farhan
    Percentage: 83.3%.   Percentage: 90.0%.

2) Create a class Book that contains four members: name, author, priece, and 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 Booke {
    String name;
    String author;
    int price;
    int numpagel;

    Booke() {};
    Booke (String name, String author, int price,
    int numpagel) {
        this.name = name;
        this.author = author;
        this.price = price;
        this.numpagel = numpagel;
    }
    public String tostring() {
        String name, author, price, numpagel);
        name = "Book name: " + this.name + "\n"};
        author = "Author name: " + this.author + "\n";
        price = "Price: " + this.price + "\n";
        numpagel = "number of pagel: " + this.numpagel + "\n";
        return name + author + price + numpagel;
    }
}
```

```
class Main
{
    public static void main (String args[]){
        Scanner s = new scanner (System.in);
        int n;
        String name;
        String author;
        int price;
        int numpagel;
        System.out.println ("Enter the number of books: ").
        n= s.nextInt();
        Books b[];
        b = new Books [n];

        for (int i=0; i<n; i++)
        {
        System.out.println ("Book" + (i+1) + ":");
        System.out.println (" Enter name of Book: ");
        name = s.next();
        System.out.println ("Enter author: ");
        author = s.next();
        System.out.println ("Enter price:");
        price = s.nextInt();
        System.out.println ("Enter no of pagel: ").
        numpagel = s.nextInt();
        b[i] = new Books (name, author, price, numpagel);
        }
        for (int i=0; i<n; i++)
            System.out.println ("Books" + (i+1) + "\n" + b[i]).
        }
    }
```

Output:

Enter the number of book:2

Book 1:
Enter the name of the Book: Jungle-Book
Enter the author of the Book: Rudguard.
Enter the price of the Book: 1000
Enter the number of pages of the Book: 500

Book 2:
Enter the name of the Book: Tales of Akbar.
Enter the author of the Book: Birbal.
Enter the price of the Book: 900
Enter the number of the pages of the Book: 400

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Book name: Jungle-Book.
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