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 details and a method to calculate SGPA of a student.

CODE:

```
import java.util.*;
class Student {
private String usn;
private String name;
 private int cred[];
private int marks[];
private int n;
void accept()
{
Scanner s=new Scanner(System.in);
System.out.println("Enter student details");
System.out.println("USN of the student:");
usn=s.next();
System.out.println("Name of student:");
name=s.next();
System.out.println("Enter the number of subjects:");
```

```
n=s.nextInt();
cred=new int[n];
marks=new int[n];
System.out.println("Enter credits and marks attained by the student in each
subject(out of 100)");
for(int i=0;i<n;i++)
{
cred[i]=s.nextInt();
marks[i]=s.nextInt();
}
}
void display()
{
System.out.println("Student details:");
System.out.println("USN:"+usn);
System.out.println("Name:"+name);
System.out.println("Marks in each subject:");
for(int i=0;i<n;i++)
{
System.out.println("Subject "+(i+1)+":"+marks[i]);
```

```
}
}
double calculate()
{
int tcp=0,tc=0;
for(int i=0;i<n;i++)
{
tc=tc+cred[i];
if(marks[i]>=50)
{
tcp=tcp+(((marks[i]/10)+1)*cred[i]);
}
else if(marks[i]>=40 && marks[i]<50)
{
tcp=tcp+(4*cred[i]);
}
}
return (double)tcp/tc;
}
}
class Main
```

```
{
public static void main(String ss[]) {
Student s1=new Student();
s1.accept();
s1.display();
System.out.println("SGPA: "+s1.calculate());
}
}
```

OUTPUT: