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.

```java
import java.util.Scanner;

class Studentsgpa{

int USN;

String Name;

int Credits[]=new int[5];

int Marks[]=new int[5];

Scanner s1=new Scanner(System.in);

void accept()

{

System.out.println("Enter the usn:");

USN=s1.nextInt();

System.out.println("Enter the name:");

Name=s1.next();

System.out.println("Enter the credits:");

for(int i=0;i<5;i++)

{

Credits[i]=s1.nextInt();

}

System.out.println("Enter the marks:");

for(int i=0;i<5;i++)

{

Marks[i]=s1.nextInt();

}

}

void display()

{

System.out.println(" The usn and name is:"+USN+" "+Name);

for(int i=0;i<5;i++)

{
```

```java
System.out.println("Marks is"+Marks[i]);
}}
int Creditscal(int Marks)
{
if(Marks>=90)
{
return 10;
}
else if(Marks>=80)
{
return 9;
}
else if(Marks>=70)
{
return 8;
}
else if(Marks>=60)
{
return 7;}
else if(Marks>=50)
{
return 6;}
else
{
return 0;}
}
double sgpacal()
{
double totalcredits=0.0,totalmarks=0.0;
for(int i=0;i<5;i++)
{
```

```java
totalcredits+=Credits[i];

totalmarks+=Creditscal(Marks[i])*Credits[i];

}

return totalmarks/totalcredits;

}}

class Sgpacal

{

public static void main(String xx[])

{

Studentsgpa a1=new Studentsgpa();

a1.accept();

a1.display();

double sgpa=a1.sgpacal();

System.out.println("SGPA is:"+sgpa);

}

}
```

Output:


```
C:\Users\Lakshitha.L\Desktop\java lab>javac Sgpacal.java

C:\Users\Lakshitha.L\Desktop\java lab>java Sgpacal
Enter the usn:
1
Enter the name:
ABC
Enter the credits:
4
4
4
4
4
Enter the marks:
99
98
97
90
99
 The usn and name is:1 ABC
Marks is99
Marks is98
Marks is97
Marks is90
Marks is99
SGPA is:10.0
```