

Week-7

Extra programs

```
1. import java.util.Scanner;
class Student
{
    String usn, name;
    int sem;
}
class Test extends Student
{
    int cie[] = new int[6];
    int credits[] = new int[6];
}
class Exam extends Test
{
    int see[] = new int[6];
}
class Result extends Exam
{
    int total[] = new int[6];
    int gpe[] = new int[6];
    void set_data(String u, String n, int s, int cie[],
    int c[], int see[])
    {
        usn = u;
        name = n;
        sem = s;
        for (int i = 0; i < 6; i++)
        {
            cie[i] = cie[i];
            credits[i] = c[i];
            see[i] = see[i];
        }
    }
}
```

System.out.println("Name: " + name);

System.out.println("USN: " + usn);

System.out.println("Sem: " + sem);

3 }

void call()

{

for(int i=0; i<6; i++)

{

total[i] = wesi[i] + (seesi[i]/2);

if (total[i] >= 90)

{

System.out.println("Grade in " + (i+1) + "
subject is S");

gp[i] = 10 * credit[i];

}

if (total[i] >= 80 && total[i] < 90)

{

System.out.println("Grade in " + (i+1) + " subject
is A");

gp[i] = 9 * credit[i];

}

if (total[i] >= 70 && total[i] < 80)

{

System.out.println("Grade in " + (i+1) + " subject is
B");

gp[i] = 8 * credit[i];

}

if (total[i] >= 60 && total[i] < 70)

{

System.out.println("Grade in " + (i+1) + " subject is
C");

gp[i] = 7 * credit[i];

}

```

if (totalCi >= 50 && totalCi < 60)
{
    System.out.println("Grade in " + (i+1) + " subject is  

    D");
    gpCi = 5 * creditsCi;
}
if (totalCi >= 40 && totalCi < 50)
{
    System.out.println("Grade in " + (i+1) + " subject  

    is E");
    gpCi = 4 * creditsCi;
}
if (totalCi < 40)
{
    System.out.println("Grade in " + (i+1) + " subject  

    is F");
    gpCi = 0 * creditsCi;
}
}
int sum_c = 0, sum_gp = 0;
for (i = 0; i < 6; i++)
{
    sum_c = sum_c + creditsCi;
    sum_gp = sum_gp + gpCi;
}
System.out.println("SGPA of the student is:"  

+ ((double) sum_gp / sum_c));
}
}
class student_main
{
    public static void main (String args[])
    {
        int z, i, j, s;
        String v, n;
    }
}

```



```

int CIE[] = new int[6];
int C[] = new int[6];
int SEE[] = new int[6];
Scanner sc = new Scanner(System.in);
System.out.println("Enter the number of
students");
z = sc.nextInt();
Result r[] = new Result[z];
for(i=0; i<z; i++)
{
    r[i] = new Result();
}
for(i=0; i<z; i++)
{
    System.out.println("Enter "+(i+1)+" student's
    USN, name and sem");
    u = sc.next();
    n = sc.next();
    s = sc.nextInt();
    for(j=0; j<6; j++)
    {
        System.out.println("Enter "+(i+1)+" student's CIE
        marks in subject "+(j+1));
        CIE[j] = sc.nextInt();
        System.out.println("Enter "+(i+1)+" student's SEE
        marks in subject "+(j+1));
        SEE[j] = sc.nextInt();
        System.out.println("Enter the credits for the
        subject "+(j+1));
        C[j] = sc.nextInt();
    }
    r[i].setData(u, n, s, CIE, C, SEE);
    r[i].calc();
}
}
}

```

```
import java.util.Scanner;

class student
{
    String usn,name;
    int sem;
}

class Test extends student
{
    int cie[]=new int[6];
    int credits[]=new int[6];
}

class Exam extends Test
{
    int see[]=new int[6];
}

class Result extends Exam
{
    int total[]=new int[6];
    int gp[]=new int[6];
    void set_data(String u,String n,int s,int CIE[],int c[],int SEE[])
    {
        usn=u;
        name=n;
        sem=s;
        for(int i=0;i<6;i++)
        {
            cie[i]=CIE[i];
            credits[i]=c[i];
            see[i]=SEE[i];
        }
    }
}
```

```

}
System.out.println("Name: "+name);
System.out.println("USN: "+usn);
System.out.println("Sem: "+sem);
}
void cal()
{
    for(int i=0;i<6;i++)
    {
        total[i]=cie[i]+(see[i]/2);
        if(total[i]>=90)
        {
            System.out.println("Grade in "+(i+1)+" subject is S");
            gp[i]=10*credits[i];
        }
        if(total[i]>=80&&total[i]<90)
        {
            System.out.println("Grade in "+(i+1)+" subject is A");
            gp[i]=9*credits[i];
        }
        if(total[i]>=70&&total[i]<80)
        {
            System.out.println("Grade in "+(i+1)+" subject is B");
            gp[i]=8*credits[i];
        }
        if(total[i]>=60&&total[i]<70)
        {
            System.out.println("Grade in "+(i+1)+" subject is C");
            gp[i]=7*credits[i];
        }
    }
}

```

```

    }
    if(total[i]>=50&&total[i]<60)
    {
        System.out.println("Grade in "+(i+1)+" subject is D");
        gp[i]=5*credits[i];
    }
    if(total[i]>=40&&total[i]<50)
    {
        System.out.println("Grade in "+(i+1)+" subject is E");
        gp[i]=4*credits[i];
    }
    if(total[i]<40)
    {
        System.out.println("Grade in "+(i+1)+" subject is F");
        gp[i]=0*credits[i];
    }
}

int sum_c=0, sum_gp=0;
for(int i=0;i<6;i++)
{
    sum_c=sum_c+credits[i];
    sum_gp=sum_gp+gp[i];
}

System.out.println("SGPA of the student is: "+((double)sum_gp/sum_c));
}
}

class student_main
{
    public static void main(String args[])

```

```

{
    int z,i,j,s;
    String u, n;
    int CIE[]=new int[6];
    int c[]=new int[6];
    int SEE[]=new int[6];
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter the number of students");
    z=sc.nextInt();
    Result r[]=new Result[z];
    for(i=0;i<z;i++)
    {
        r[i]=new Result();
    }
    for(i=0;i<z;i++)
    {
        System.out.println("Enter "+(i+1)+" student's USN,name and sem");
        u=sc.next();
        n=sc.next();
        s=sc.nextInt();
        for(j=0;j<6;j++)
        {
            System.out.println("Enter "+(i+1)+" student's CIE marks in subject "+(j+1));
            CIE[j]=sc.nextInt();
            System.out.println("Enter "+(i+1)+" student's SEE marks in subject "+(j+1));
            SEE[j]=sc.nextInt();
            System.out.println("Enter the credits for the subject "+(j+1));
            c[j]=sc.nextInt();
        }
    }
}

```



```
    r[i].set_data(u, n, s, CIE, c, SEE);  
    r[i].cal();  
}  
}  
}
```

```
C:\Users\Adithi\Desktop\java_prgs>java student_main
Enter the number of students
2
Enter 1 student's USN,name and sem
1bm10cs111
Aditi
2
Enter 1 student's CIE marks in subject 1
40
Enter 1 student's SEE marks in subject 1
89
Enter the credits for the subject 1
3
Enter 1 student's CIE marks in subject 2
36
Enter 1 student's SEE marks in subject 2
90
Enter the credits for the subject 2
3
Enter 1 student's CIE marks in subject 3
37
Enter 1 student's SEE marks in subject 3
93
Enter the credits for the subject 3
3
Enter 1 student's CIE marks in subject 4
35
Enter 1 student's SEE marks in subject 4
87
Enter the credits for the subject 4
4
Enter 1 student's CIE marks in subject 5
39
Enter 1 student's SEE marks in subject 5
97
Enter the credits for the subject 5
5
Enter 1 student's CIE marks in subject 6
40
Enter 1 student's SEE marks in subject 6
100
Enter the credits for the subject 6
6
Name: Aditi
USN: 1bm10cs111
Sem: 2
Grade in 1 subject is A
Grade in 2 subject is A
Grade in 3 subject is A
Grade in 4 subject is B
Grade in 5 subject is A
Grade in 6 subject is S
SGPA of the student is: 9.083333333333334
Enter 2 student's USN,name and sem
```

```
SGPA of the student is: 9.083333333333334
Enter 2 student's USN,name and sem
1bm10cs222
Anu
2
Enter 2 student's CIE marks in subject 1
39
Enter 2 student's SEE marks in subject 1
70
Enter the credits for the subject 1
3
Enter 2 student's CIE marks in subject 2
41
Enter 2 student's SEE marks in subject 2
97
Enter the credits for the subject 2
3
Enter 2 student's CIE marks in subject 3
49
Enter 2 student's SEE marks in subject 3
89
Enter the credits for the subject 3
3
Enter 2 student's CIE marks in subject 4
35
Enter 2 student's SEE marks in subject 4
88
Enter the credits for the subject 4
4
Enter 2 student's CIE marks in subject 5
50
Enter 2 student's SEE marks in subject 5
100
Enter the credits for the subject 5
5
Enter 2 student's CIE marks in subject 6
39
Enter 2 student's SEE marks in subject 6
90
Enter the credits for the subject 6
6
Name: Anu
USN: 1bm10cs222
Sem: 2
Grade in 1 subject is B
Grade in 2 subject is A
Grade in 3 subject is S
Grade in 4 subject is B
Grade in 5 subject is S
Grade in 6 subject is A
SGPA of the student is: 9.041666666666666
C:\Users\Adithi\Desktop\java_prgs>
```