Week-7 Extera perogerams import java-util-scanner clair student Storing usn, name; int sem; class Test extends Student int well = new int[6] int oudits (7 - new & int [6] class Exams extends Test int see [] new int(b); class Result extends Exam int total[] - new INT[6]; int gpEJ = new int C6] void set datal string v, string n, int s, int acts indeces, int seems usn=u name-n; sem = 8; por (int i = 0; ix 6; i++) cieci]: CIECI]: guditsci] = cci]: Seeli] = SEELI]

```
System out printly (" Nome: "+ name)
 System. out. Println ("USN: "+ usn);
System out pountly ("Sem: " + sem);
void (all)
  for lint (=0; ix6; i+1)
   totalti] = vieti] + ( seeti] (2);
   if (total [i] >=90)
   System-out println ("Grade in" + (i+1)+"
   subject is s").
   apail=10+ meditsaij.
   if (fota (i) >= 80 & & botalti] < 90)
    System. out prindln (" Grade in "+ (i+1)+ " Subject
    april = 9 * meditsril;
   i) (totalii) >= 70 & & total (i) (80)
   System out println (" Ovade in " + ci+D+" subject is
   aprij = 87 budits cij
   if (totalli) 7=60 8 8 totalli] ( To)
    System-out-println ("Grade in "+ 4+1)+ " subject il
    apail = 1+ vuditsail;
```

41 total Ci]>= so & 8 total Ci] (60) Systemout-println ("Grade in "+ (i+D) " subjective gpti]: 5 to credits ci] it (totalai)>=40 88 totalai] (50) System out println (" Creade in " + ci+1) - " subject Tistibur + 4 = (i) 9p il (60 4) 20 (40) ji System-out-println("Grade in "+ ci+1)+ "subject aptil: 0 * vedits til; int sumec=0, sum_gp=0; for (i=0; C(6; C+1) sum_c= sum_c + oreditacij' Sum-gp= sum-gp + gpai]; System out paintly ("SGPA of the student is:"
+ (sum gp/sum c)); chall student main public static void main (storing anys CI) int Z, i, J, &;

```
int (IEC) - new int [6]
int c[]- new int C6]:
ind SEECJ - new int Co]
Beanner 10= new & canner ( Byst em. in)
System out println ("Enter the number of
students").
Z= &CNEXINTUS;
Result 96]: new Result [I]
 er (i=0; i(z;i+1)
 Mili- new Result V.
 199 (i=0; i(Z; i+1)
   System. out-pountly ("Enter"+ (i+1)+" student's
   USN, name and sem ");
   U= & c-next();
   n= sinexti);
    1 = SC- MERTINEL);
    forci=0; j(6; j++)
   System out println (" Enter"+ci+1)+" student's (IE
marks in subject "+cj+1);
    CIE (j)= sc next Intel;
   System. out-pointln("Enter"+ (i+1)+ " Student's SEE
    marks in subject "+ C+13);
    SEE (1) - ACMENTINELY;
    System out println ("Enter the redits for the
    Subject "+ (j+1));
     Childrens = Eis
      91 [i]. Set_data (U,n, &, CIE, C, SEE);
      91 all cally
```

```
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
Enter 1 student's USN, name and sem
1bm10cs111
Aditi
Enter 1 student's CIE marks in subject 1
Enter 1 student's SEE marks in subject 1
Enter the credits for the subject 1
Enter 1 student's CIE marks in subject 2
Enter 1 student's SEE marks in subject 2
90
Enter the credits for the subject 2
Enter 1 student's CIE marks in subject 3
Enter 1 student's SEE marks in subject 3
Enter the credits for the subject 3
Enter 1 student's CIE marks in subject 4
Enter 1 student's SEE marks in subject 4
Enter the credits for the subject 4
Enter 1 student's CIE marks in subject 5
Enter 1 student's SEE marks in subject 5
Enter the credits for the subject 5
Enter 1 student's CIE marks in subject 6
40
Enter 1 student's SEE marks in subject 6
Enter the credits for the subject 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: 9.0833333333333334
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
Enter 2 student's CIE marks in subject 1
39
Enter 2 student's SEE marks in subject 1
Enter the credits for the subject 1
Enter 2 student's CIE marks in subject 2
Enter 2 student's SEE marks in subject 2
Enter the credits for the subject 2
Enter 2 student's CIE marks in subject 3
Enter 2 student's SEE marks in subject 3
Enter the credits for the subject 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
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
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
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>
```