Week 4

```java
import java.util.Scanner;
class student
{
    private String usn;
    private String sname;
    private double sgpa;
    private int []c.
    private int [] marks;
    private int size = 5;

    void acceptDetails ()
    {
        Scanner S1 = new Scanner (System.in);
        System.out.println ("Enter the USN");
        usn = S1.next();
        System.out.println ("Enter the sname");
        sname = S1.next();
        c = new int [size];
        marks = new int [size];
        for (int i=0; i< size ; i++)
        {
            System.out.println ("Enter the credits
            and marks of subject " +i);
```

```
        C[i] = SI.nextInt();
        marks[i] = SI.nextInt();
    }
}

void calculate()
{
    int num=0, deno=0, gradep=0;
    for(int i=0; i<size; i++)
    {
        if(marks[i]>=90)
        gradep=10;
        else if(marks[i]>=80)
        gradep=9;
        else if(marks[i]>=70)
        gradep=8;
        else if(marks[i]>=60)
        gradep=7;
        else if(marks[i]>=50)
        gradep=5;
        else if(marks[i]>=40)
        gradep=4;
        else if(marks[i]>=40)
        gradep=0;
        num += gradep * C[i];
```

```java
        deno += c[i];
    }

    sgpa = num/deno;
    System.out.println("Student
            sgpa is :" + sgpa);
}

void printDetails()
{
    System.out.println("Student Details");
    System.out.println("Student USN:" + usn);
    System.out.println("Student name:" + sname);
    for(int i=0; i < size; i++)
    {
        System.out.println("Credit is :" + c[i]);
        System.out.println("Marks of
                subject" + i + " " + marks[i]);
    }
}
}

Class StudentMain
{
```

```
        public static void main (String args[])
        {

            Student S1 = new Student();
            S1. acceptDetails();
            S1. print Details();
            S1. calculate();

        }

    }
```

ALGORITHM

Step 1: Create a method class with name Student under class containing usn, sname, sgpa, array of credits and marks.

Step 2: A function acceptDetails, accepts the usn, name, credits and marks of a student.

Step 3: A function calculate, takes gradepoints for according to the marks by if else if statements.
Then sgpa = num/deno.

Step 4: A function print details() which user inputs.

Step 5: Under main class, or declare method and call the functions for execution.

Step 6: END