2 Develop a Java program to create a class Students with member USN, name, an array credits and an array marks include methods to accept and display details and to calculate SGPA of a student.

```
import java.util.Scanner;
class student
{
    String name, usn;
    int marks[] = new int [5];
    int credits [] = new int [5];

    void input()
    {
      Scanner ss = new Scanner (System.in);
      System.out.println("Enter your name:");
      name = ss.nextLine();
      system.out.println("Enter your usn:"}
      usn = ss.next();
      System.out.println("Enter the marks of
        each subject:");
      for(int i=0; i< 5; i++)
      {
          marks [i] = ss.nextInt();
      }
        System.out.println("Enter the number
          of credits for each subject:");
        for(int i= 0; i<5; i++)
            credits [i]= ss.nextInt();
      }

void display()
{
```

```
System.out.println("NAME: " + name);
System.out.println("USN: " + usn);
for (int i=0; i<5; i++)
  {
    system.out.println("Marks of
      each subject" + (i+1) + " = " + mark
    System.out.println("Number of
      credits for each subject" + (i+1)
      + " = " + credits[i]);
  }
}
void calc()
{
  int gr_point[] = new int[5];
  int sgpa = 0;
  int sum = 0; float res;
  for (int i=0; i<5; i++)
  {
    if (marks[i] >= 90)
      gr_point[i] = 10;
    else if (marks[i] >= 80)
      gr_point[i] = 9;
    else if (marks[i] >= 70)
      gr_point[i] = 8;
    else if (marks[i] >= 60)
      gr_point[i] = 7;
    else if (marks[i] >= 50)
      gr_point[i] = 6;
    else if (marks[i] >= 40)
      gr_point[i] = 5;
    else if (marks[i] >= 35)
      gr_point 4;
    else if (marks[i] < 35 && marks > 0)
      gr_point = 0;
```

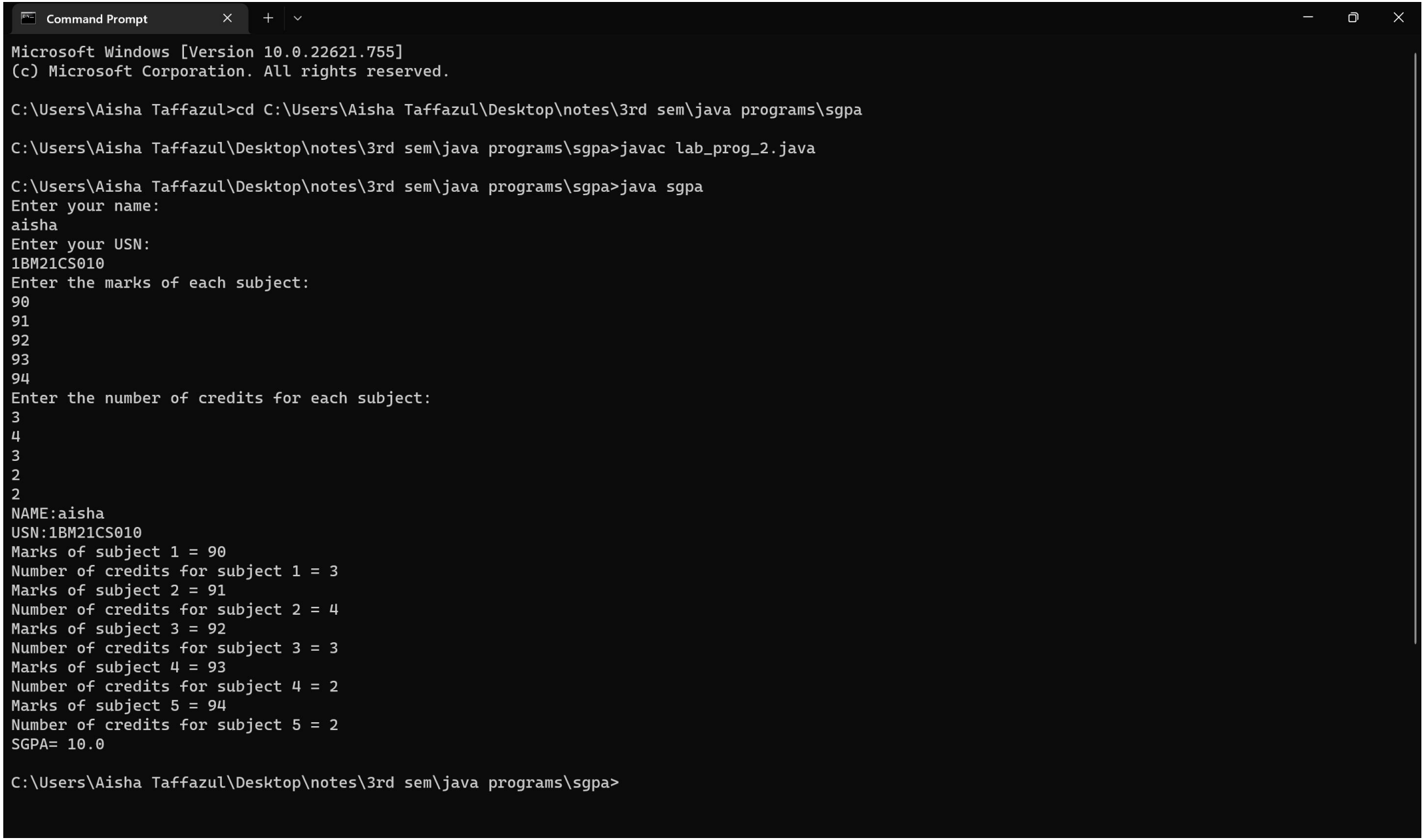
```
        else
          System.out.println("Invalid marks
                for subject" + (i+1) + "
                entered. Try Again");
          sgpa += (gr_point[i] * credits[i]);
          sum += (credits[i]);
        }
        res = (float) sgpa / sum;
          System.out.println("SGPA = " + res);
    }
}
class sgpa
{
    public static void main (String xx[])
    {
        student s1 = new student();
        s1.input();
        s1.display();
        s1.calc();
    }
}
```

Output:

Enter your USN:
1BM21CS010
Enter the marks of each subject:
90
91
92
93
94
Enter the number of credits for each subject:
3
4

3
2
2

NAME: aisha
USN: 1BM21CS010
Marks of subject 1 = 90
No. of credits for the subject 1 = 3
Marks of subject 2 = 91
No. of credits for the subject 2 = 4
Marks of subject 3 = 92
No. of credits for the subject 3 = 3
Marks of subject 4 = 93
No. of credits for the subject 4 = 2
Marks of subject 5 = 94
No. of credits for the subject 5 = 2
SGPA = 10.0


Command Prompt
Microsoft Windows [Version 10.0.22621.755]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Aisha Taffazul>cd C:\Users\Aisha Taffazul\Desktop\notes\3rd sem\java programs\sgpa
C:\Users\Aisha Taffazul\Desktop\notes\3rd sem\java programs\sgpa>javac lab_prog_2.java
C:\Users\Aisha Taffazul\Desktop\notes\3rd sem\java programs\sgpa>java sgpa
Enter your name:
aisha
Enter your USN:
1BM21CS010
Enter the marks of each subject:
90
91
92
93
94
Enter the number of credits for each subject:
3
4
3
2
2
NAME:aisha
USN:1BM21CS010
Marks of subject 1 = 90
Number of credits for subject 1 = 3
Marks of subject 2 = 91
Number of credits for subject 2 = 4
Marks of subject 3 = 92
Number of credits for subject 3 = 3
Marks of subject 4 = 93
Number of credits for subject 4 = 2
Marks of subject 5 = 94
Number of credits for subject 5 = 2
SGPA= 10.0
C:\Users\Aisha Taffazul\Desktop\notes\3rd sem\java programs\sgpa>