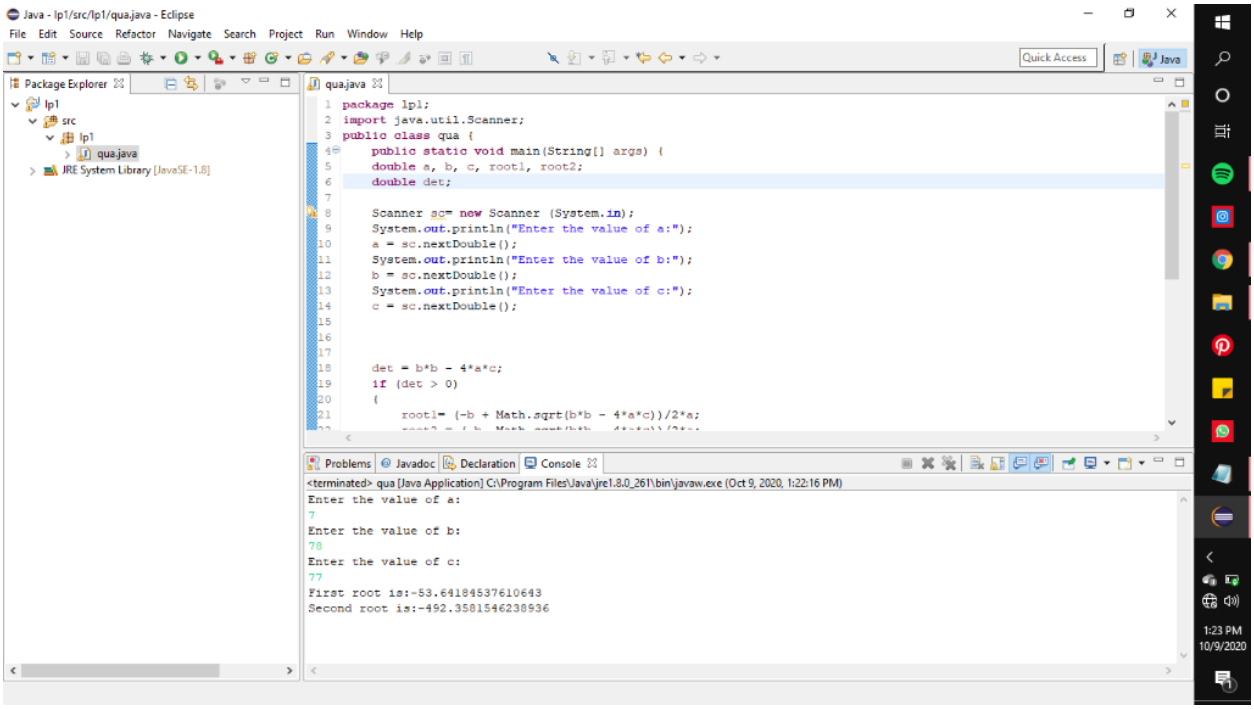
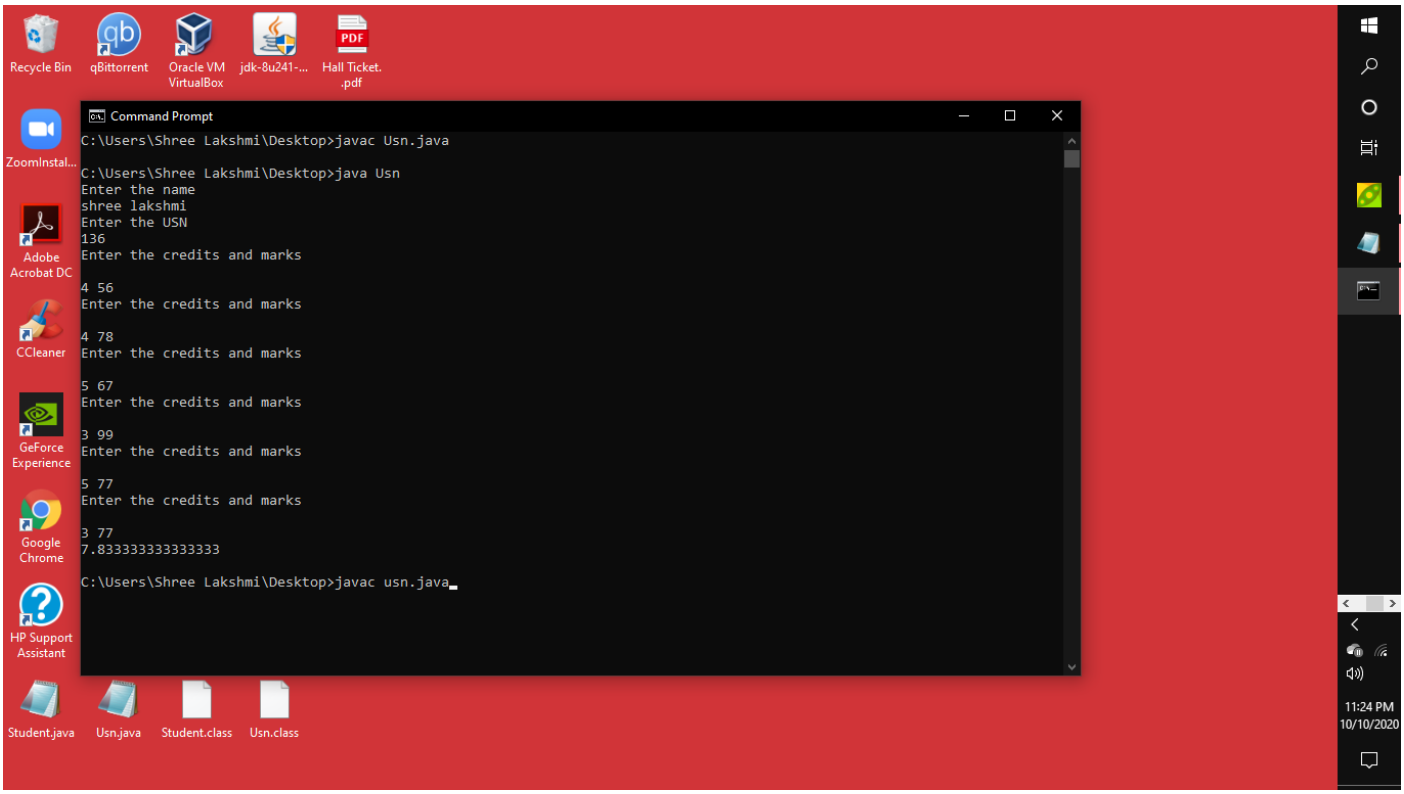
Develop a Java program that prints all real solutions to the quadratic equation ax2 +bx+c = 0.

Read in a, b, c and use the quadratic formula. If the discriminate b2-4ac is negative, display a message stating that there are no real solutions.



Program 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.


Recycle Bin
qBittorrent
Oracle VM VirtualBox
jdk-8u241-...
Hall Ticket.pdf
ZoomInstal...
Adobe Acrobat DC
CCleaner
GeForce Experience
Google Chrome
HP Support Assistant
Student.java
Usn.java
Student.class
Usn.class
Command Prompt
C:\Users\Shree Lakshmi\Desktop>javac Usn.java
C:\Users\Shree Lakshmi\Desktop>java Usn
Enter the name
shree lakshmi
Enter the USN
136
Enter the credits and marks
4 56
Enter the credits and marks
4 78
Enter the credits and marks
5 67
Enter the credits and marks
3 99
Enter the credits and marks
5 77
Enter the credits and marks
3 77
7.833333333333333
C:\Users\Shree Lakshmi\Desktop>javac usn.java
11:24 PM
10/10/2020

9 Sept 2020 Week-3.

Lab program-1 1BM19CS136

Quadratic Equation.

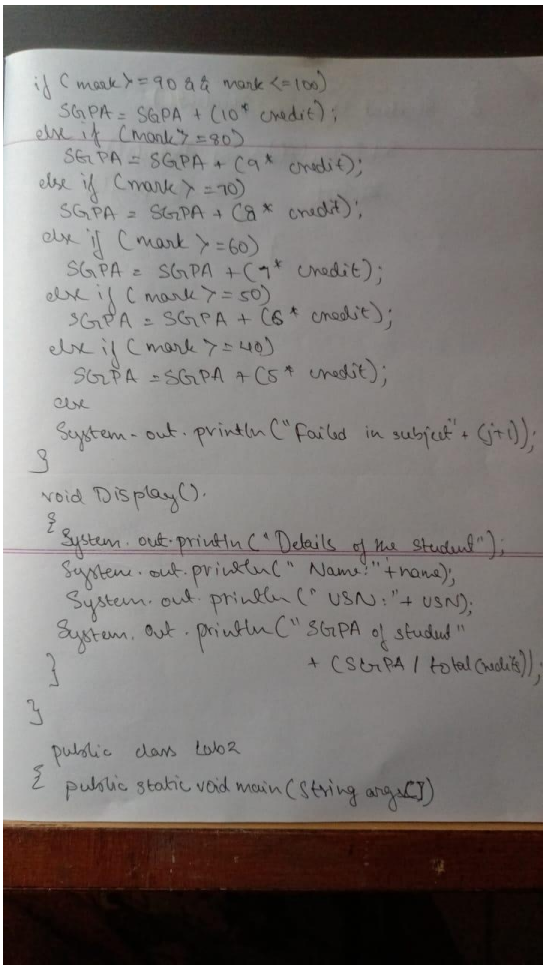
```
import java.util.Scanner;
public class Quadratic
{
  public static void main (String[] args )
{ double a, b, c, root1, root2;
  double d;
  Scanner sc = new Scanner(System.in);
  System.out.println (" Enter the value of b:");
  b = sc.nextDouble();
  System.out.println (" Enter the value of a:");
  a = sc.nextDouble();
  System.out.println (" Enter the value of c:");
  c = sc.next.Double();

  d = b*b-4*a*c;
  if (d>0)
{  root1=(-b+Math.sqrt(b*b-4*a*c))/2*a;
   root2=(-b-Math.sqrt(b*b-4*a*c))/2*a;
   System.out.println ("First root is:"+root1);
   System.out.println ("Second root is:"+root2);
  else if (d==0)
{  root1=-b/(2*a);
   System.out.println (" Both roots are same and
   are equal to:" +root1); }
   else if (d<0)
   {  System.out.println ("Real roots don't exist");
   }
  }
}
```

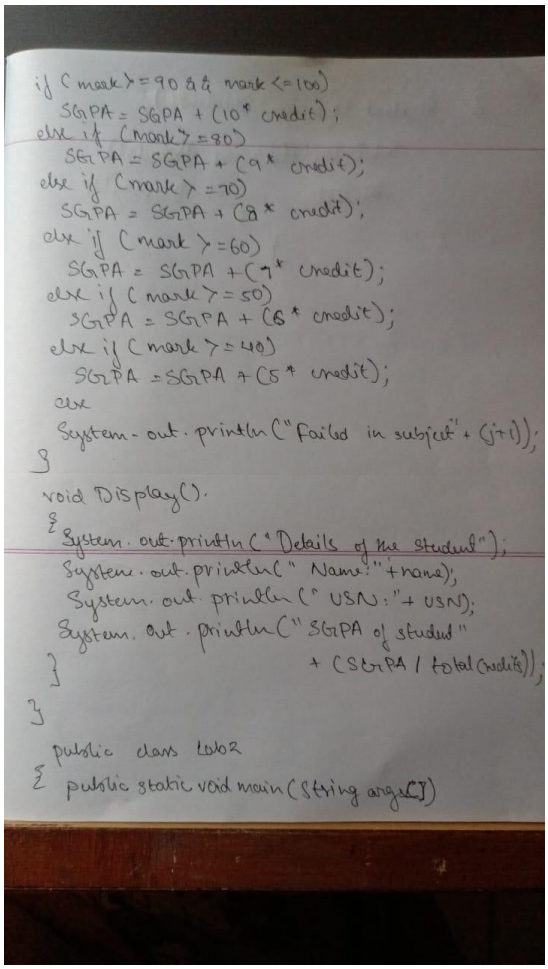
9 Sept, 2020 Week-3.

Lab program-2 1BM19CS136.

```
import java.util.Scanner;
class Student
{
   private int n;
   private string name, USN;
   private double SGPA=0;
   private int totalcredits = 0;
Scanner ss = new Scanner(System.in);
```



```
if (mark >= 90 && mark <= 100)
  SGPA = SGPA + (10 * credit);
else if (mark >= 80)
  SGPA = SGPA + (9 * credit);
else if (mark >= 70)
  SGPA = SGPA + (8 * credit);
else if (mark >= 60)
  SGPA = SGPA + (7 * credit);
else if (mark >= 50)
  SGPA = SGPA + (6 * credit);
else if (mark >= 40)
  SGPA = SGPA + (5 * credit);
else
System.out.println("Failed in subject" + (j+1));
}
void Display().
{
System.out.println("Details of the student");
 System.out.println("Name:" +name);
 System.out.println("USN:" + USN);
System.out.println("SGPA of student"
                    + (SGPA / totalCredits));
}
}
public class Lab2
{ public static void main(String args[])
```



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}
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{ public static void main(String args[])
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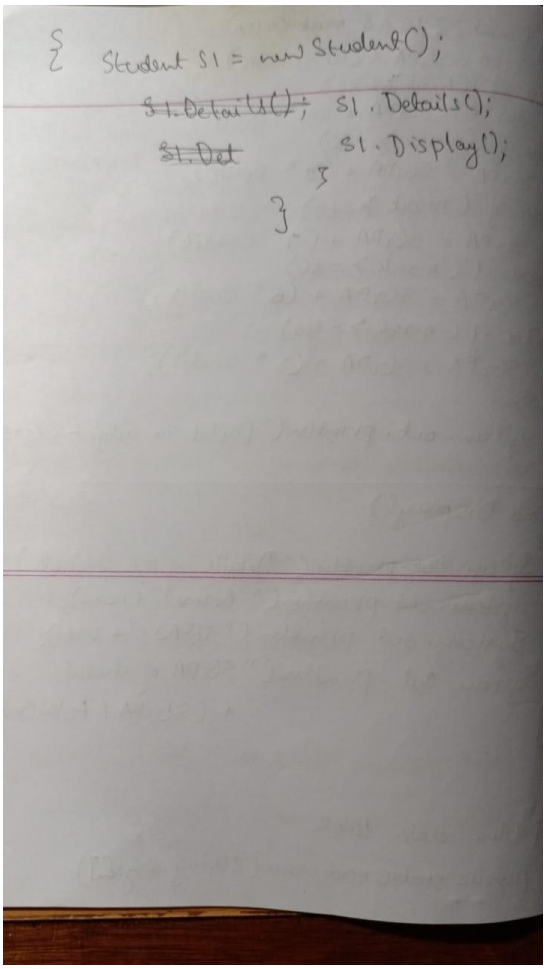
{
Student S1 = new Student();
S1.Details();
S1.Display();
}