JUBAIL UNIVERSITY COLLEGE

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

SEMESTER 431

GROUP ASSIGNMENT (6%)

Course Code	CS231	**Course Title**	Programming II	**Section**	203
Date Given	23-11-2021	**Date of Submission**	**Tuesday 14-12-2021 (at 11:59 pm)**		

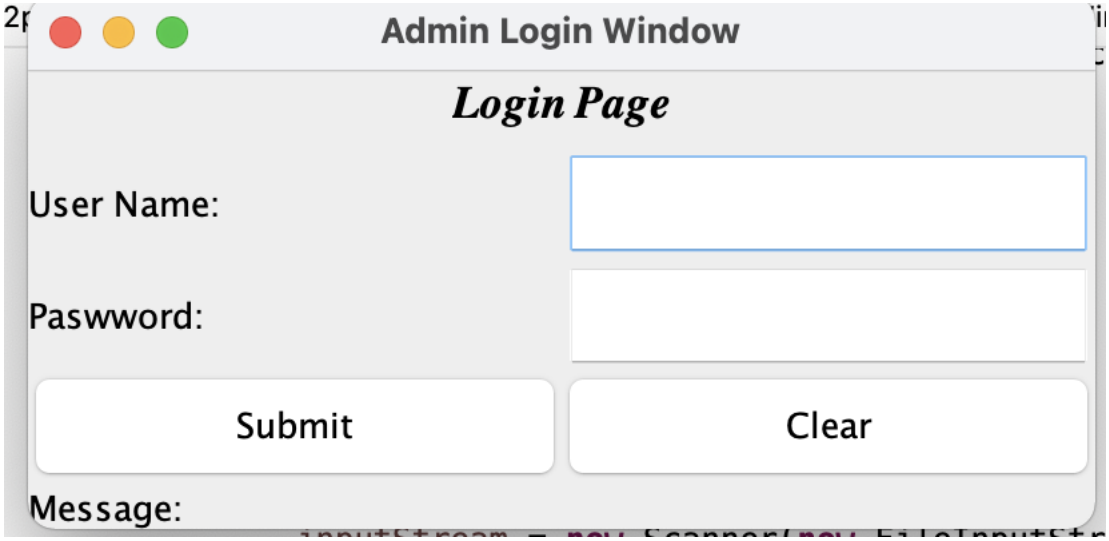
PART I	**TO BE FILLED BY THE STUDENT**		
STUDENT'S NAME	**Raneem Alshehri**	**ID. No.**	**401200244**
STUDENT'S NAME	**Johrah Khabti**	**ID. No.**	**401200096**
STUDENT'S NAME	**Manar Alali**	**ID. No.**	**421200173**

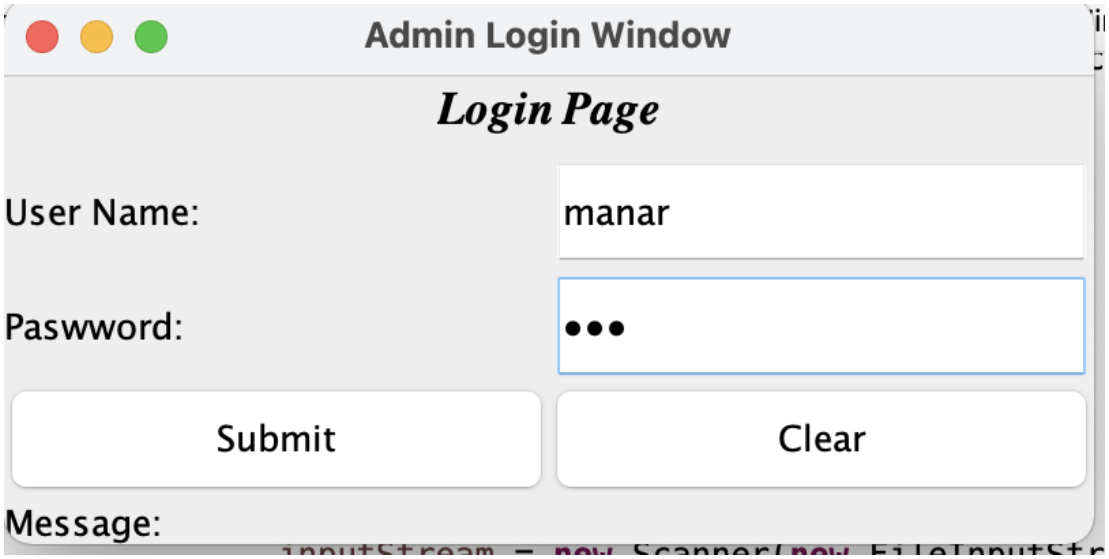
TO BE FILLED BY THE CONCERNED DEPARTMENT

PART II		**1st Marker**	
Area of Assessment	**Max Marks**	**Actual Marks**	**Comments/Remarks**
Total	**100**		
Percentage	**6%**		
Name:			
Signature:			

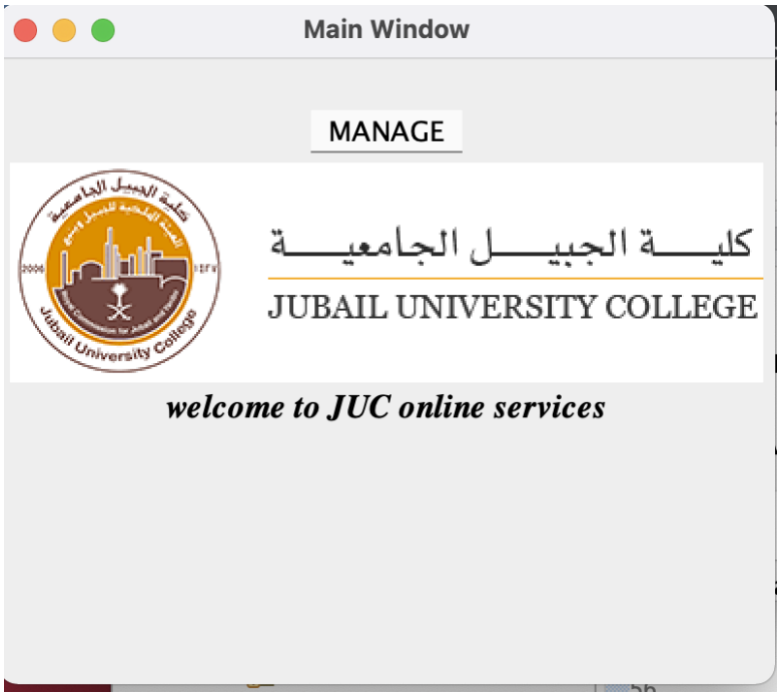
This is a project which models a real-life Student Information System (SIS), though less complex. This paper will follow a step-by-step documentation of all the windows and interfaces made, as well as the files that were written and read to and from the program.

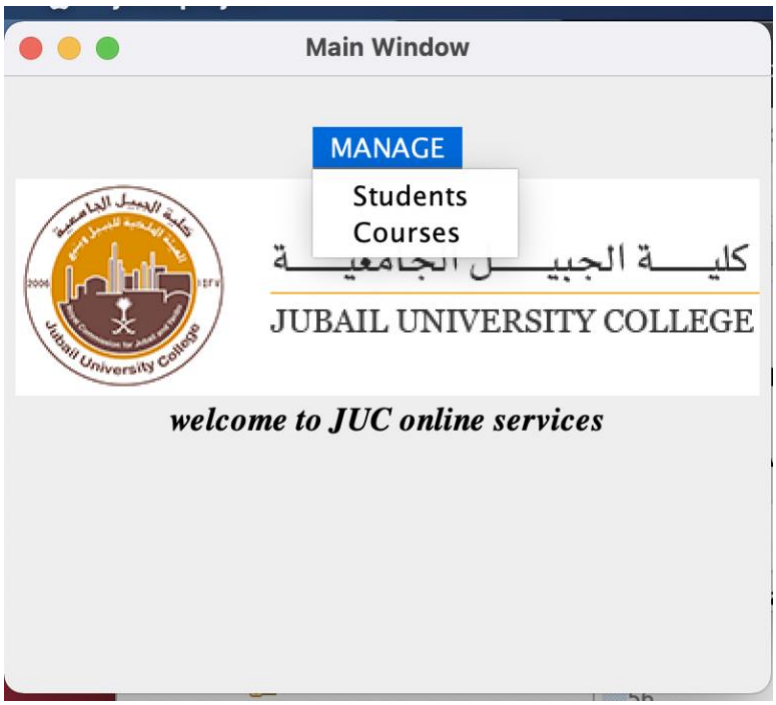
1. **A login window was made for the admin to enter the System using their username and password**





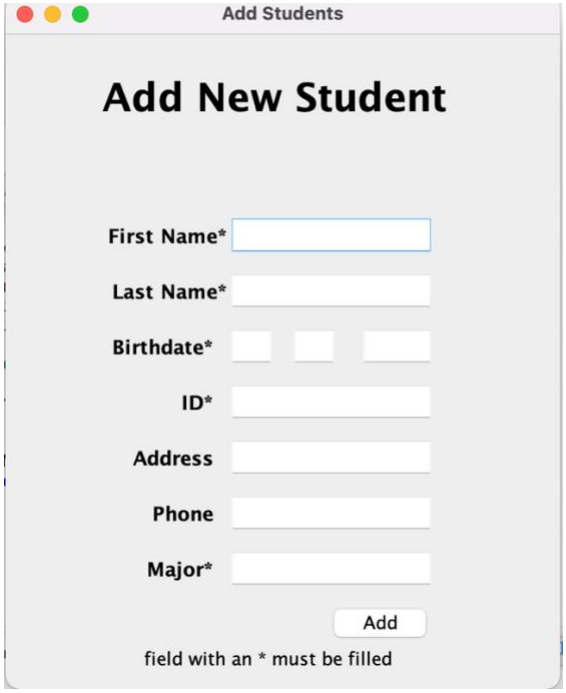
2. After the Submit button is clicked, and data is valid. The main window will pop, it has a welcome message with the JUC icon. And a menu called Manage, containing 2 menu items: Students and Courses.

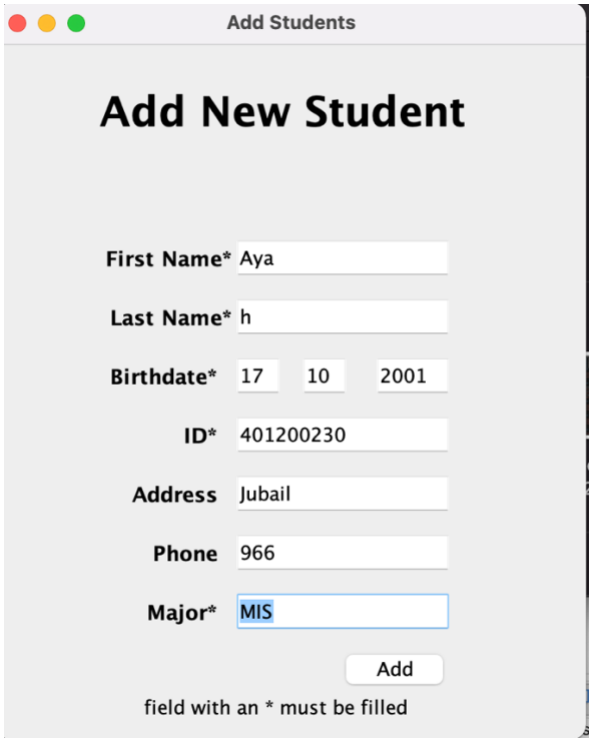




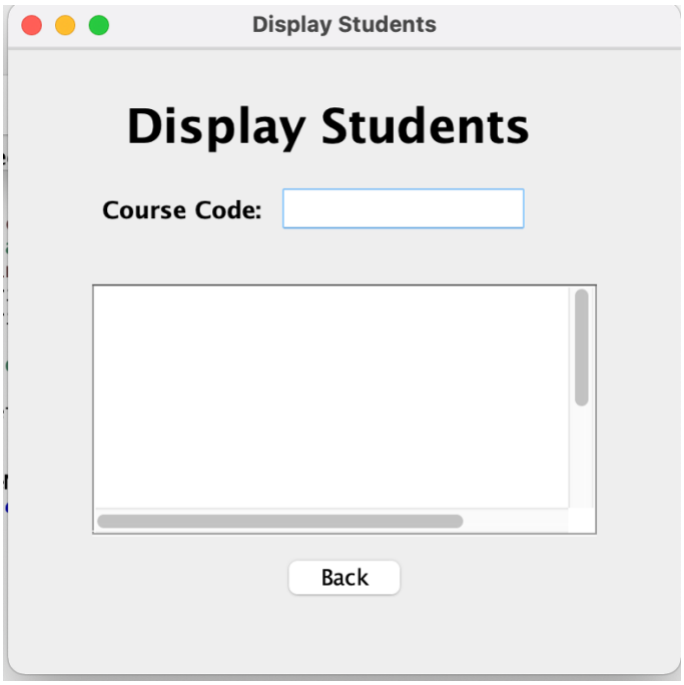
3. When the Students option is clicked, it'll take you to a Mange Students Window that has 3 functions: Add students, Display students, and Add Courses. Depending on what is chosen a new window will pop. But all these options are interconnected to each other and related to the Manage Courses menu.

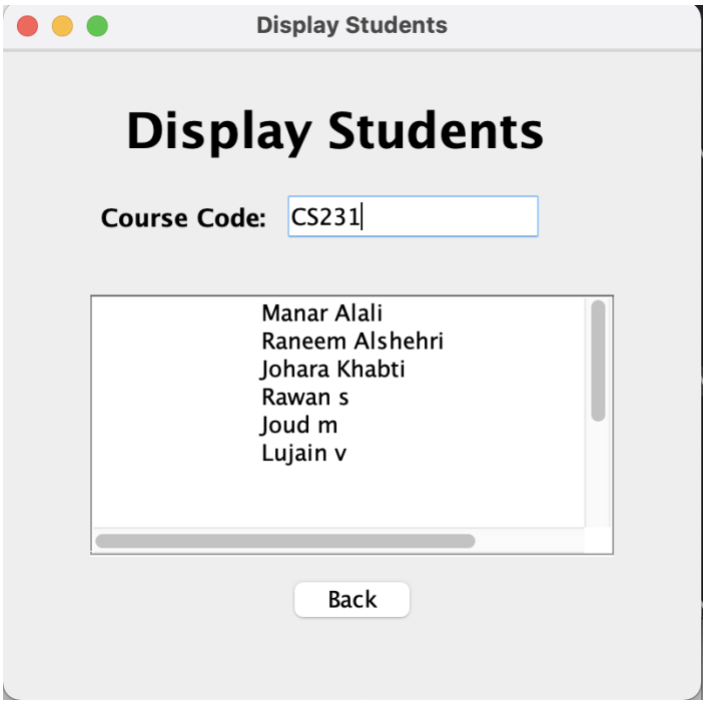
4. If Add New Students is clicked, then it will redirect you to another window. It has fields with information like First Name, ID, etc…., If the field is labeled with an asterisk (*), then it is a must to fill it, otherwise a warning message will be seen.



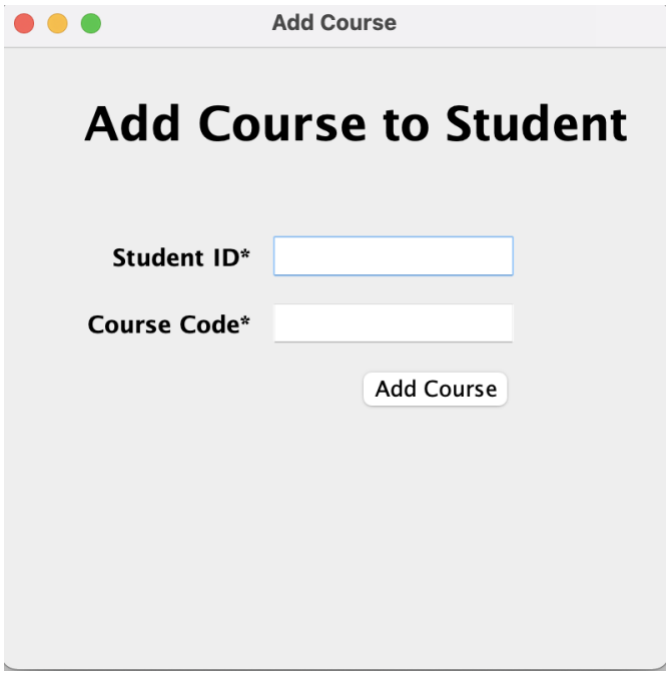


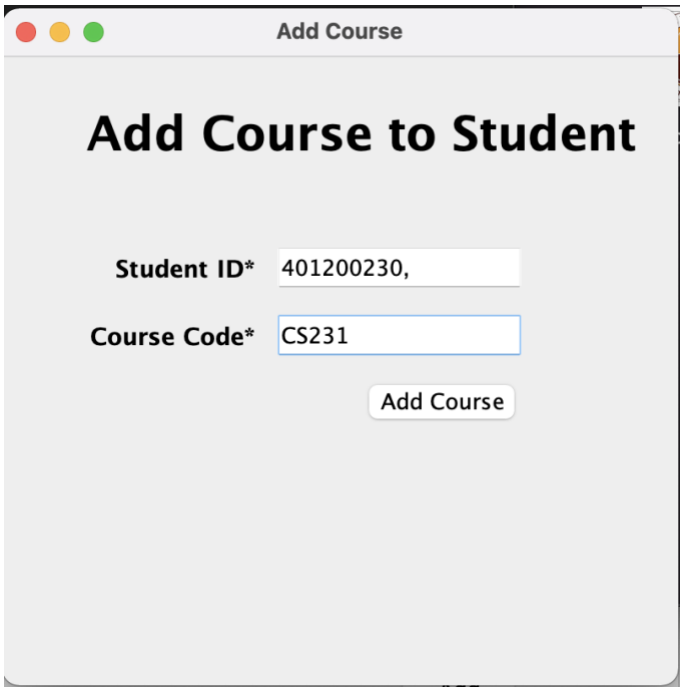
5. If Display Students is clicked, then a new Window will be seen. It needs just the Course code entered to list all the students entered in a certain course.



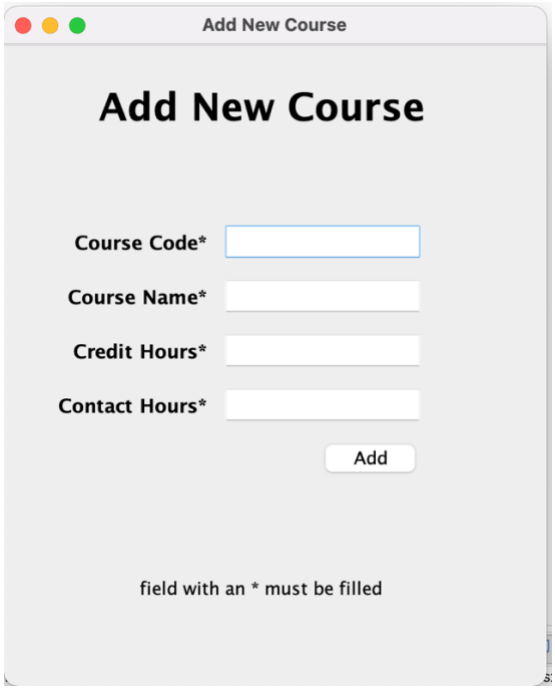


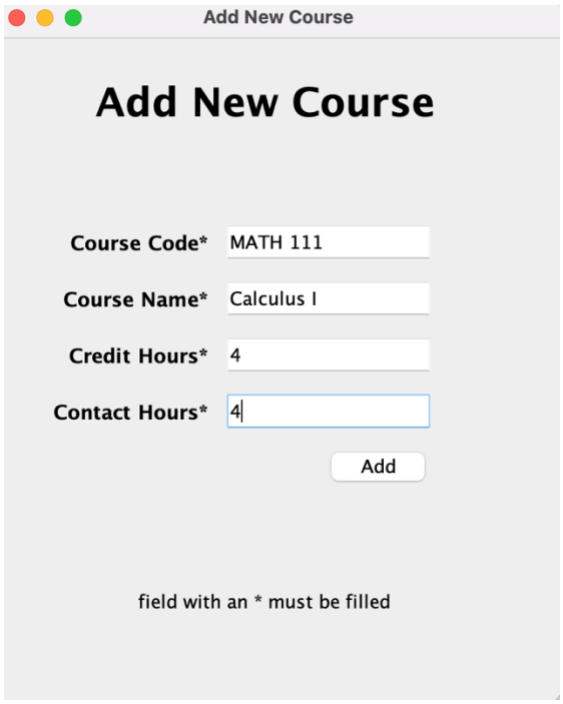
6. When the Add Couse option is chosen, then the ID of the student must be entered with the course code they will study, to add the course to their system.



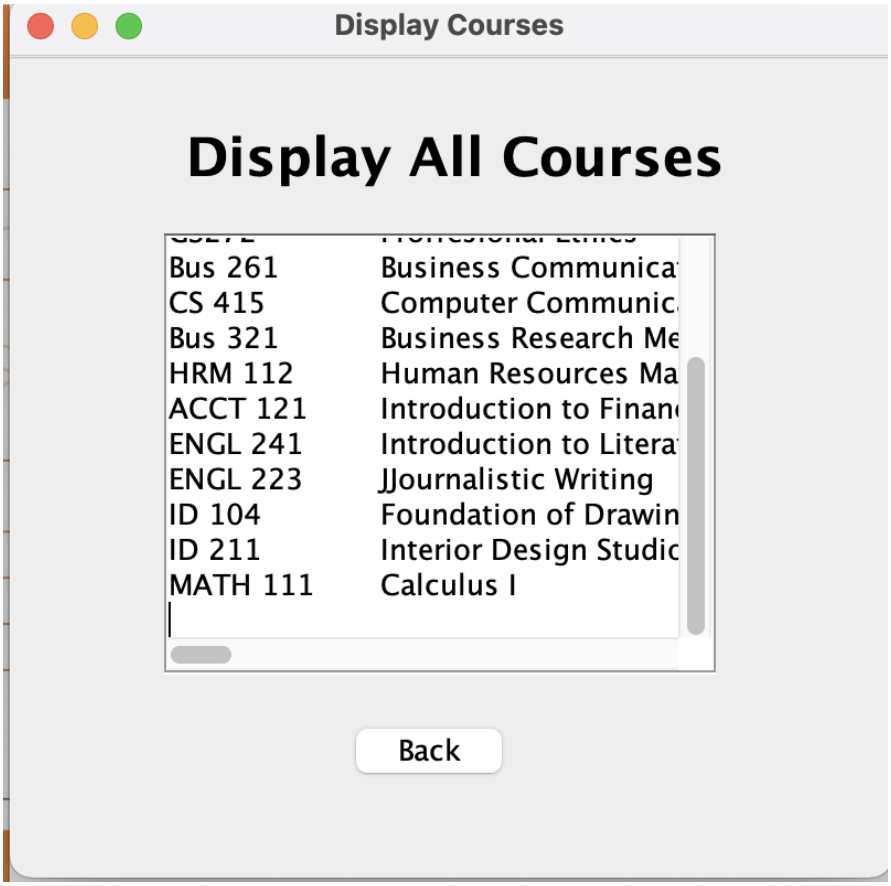


7. This concludes the Manage Student Window, and now a further look on Manage Courses will be done. The first option in the menu: Add new Courses. This has 4 fields that create a new course in the system. And could be used in assigning each student their course.

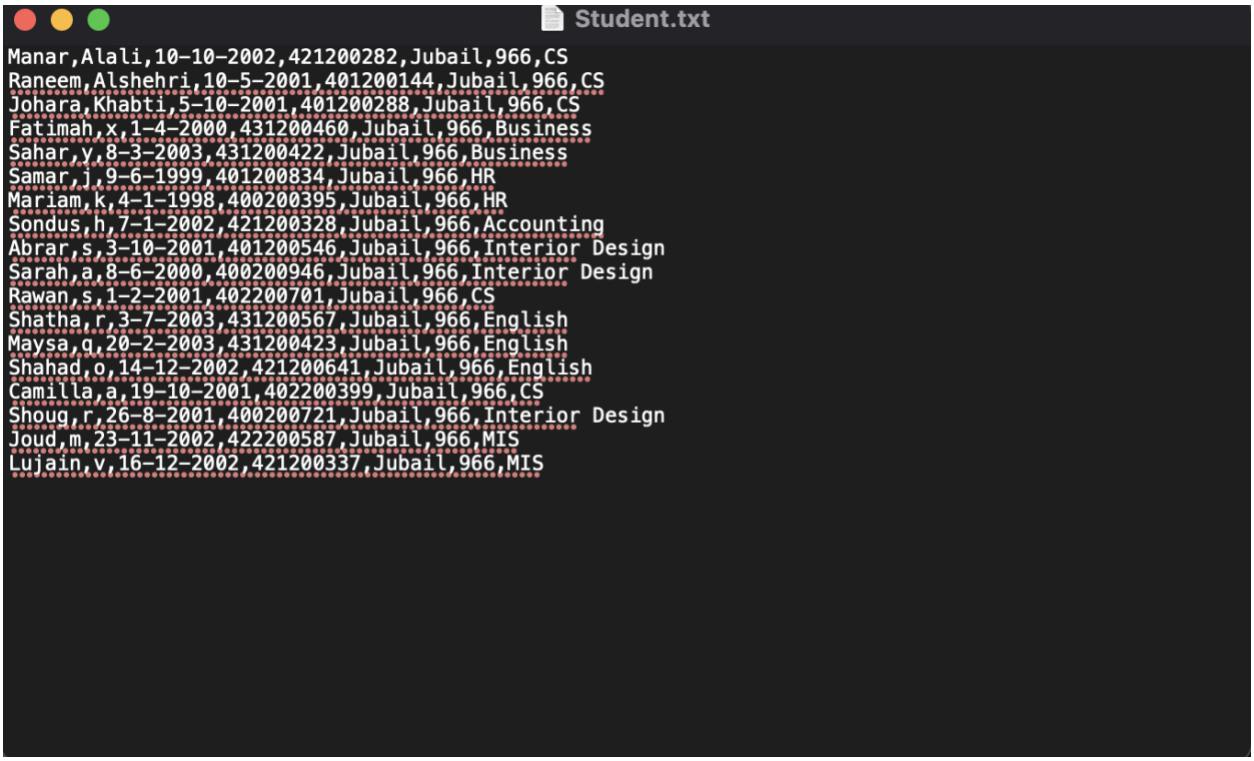




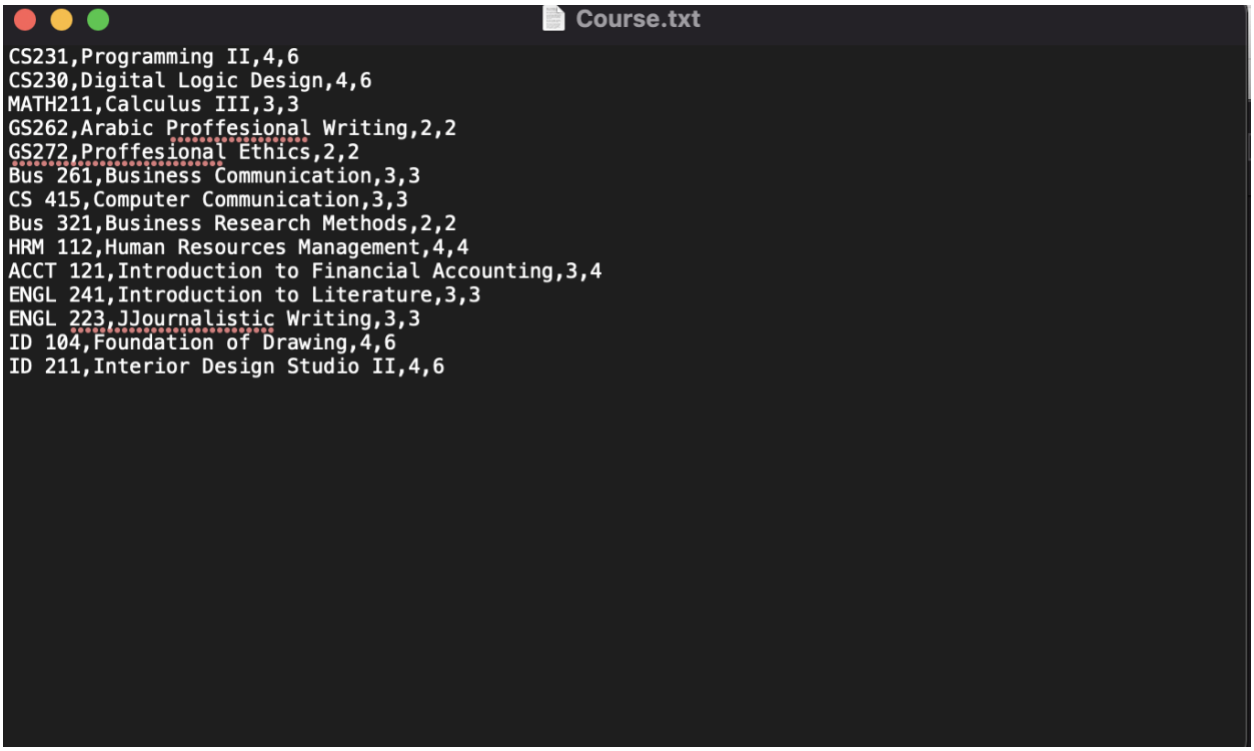
8. The Display Courses option displays all courses added to the system in a JTextArea with both vertical and horizontal scrollbars.



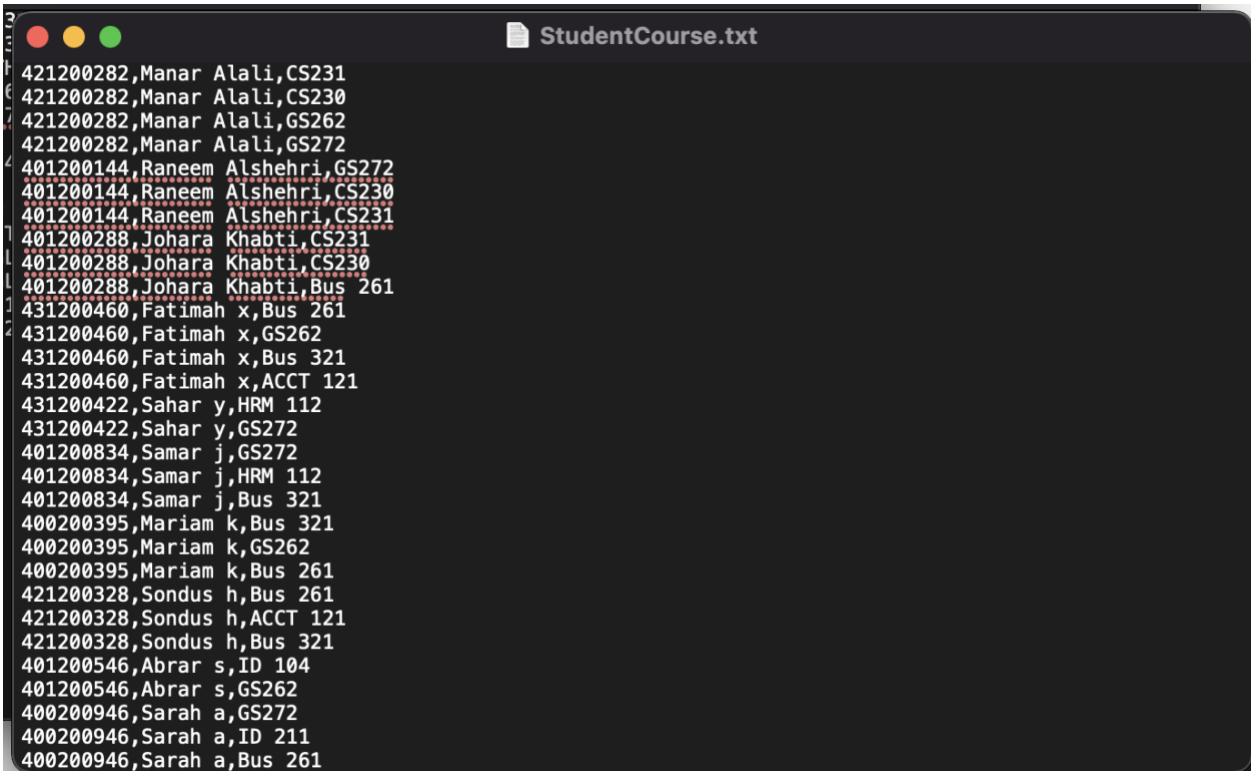
9. The “Student.txt” is the file that is being written on by the program. It takes in information about the student and stores it in the file. It is later read and displays all the students



10. “Course.txt”, is another file that stores information that is valuable for the program. It is first written to and holds the data for all the courses. Then, it reads from the file and displays the data.



11. The “StudentCourse.txt” file, combines both the above-mentioned files. It creates a file that is useful for the process of adding a course for a specific student.



12.Text of the code:

- //Making the code visible:

```
package java2project;

public class java2project {

	public static void main(String[] args) {

		// instantiating the window
	adminLoginWindow admin_Login_Window= new adminLoginWindow();
//		mainWindow main_Window=new mainWindow();

		admin_Login_Window.setVisible(true);
//		main_Window.setVisible(true);

	}

}
```

--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--

```
//Main Window:
package java2project;

import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;


import javax.swing.*;


public class mainWindow extends JFrame implements
ActionListener  {

        public mainWindow() {

                //window 2 that has 2 options for students and courses

                        this.setTitle("Main Window");
                        this.setSize(400,350);

        this.setDefaultCloseOperation(HIDE_ON_CLOSE);
```

```
                this.setLayout(new FlowLayout());


                // menu
                JMenu Manage= new JMenu("MANAGE");
                this.add(Manage);

                //menu item
                JMenuItem Manage_Students_Window = new JMenuItem("Students");

                Manage_Students_Window.addActionListener(this);
                Manage.add(Manage_Students_Window);

                JMenuItem Manage_Courses_Window= new JMenuItem("Courses");

                Manage_Courses_Window.addActionListener(this);
                Manage.add(Manage_Courses_Window);


                //menu bar
                JMenuBar menuBar= new JMenuBar();

                this.setJMenuBar(menuBar);
```

```
                this.add(menuBar);
                menuBar.add(Manage);

        //icon

                ImageIcon JUC_icon= new ImageIcon("Unknown.png");
                JLabel JUC_label=new JLabel(JUC_icon);
                this.add(JUC_label);


        //massage
                JLabel JUC_text=new JLabel("welcome to JUC online services");
                this.add(JUC_text);


            //font
                JUC_text.setFont (new Font ("TimesRoman", Font.BOLD | Font.ITALIC, 17));

                this.setVisible(true);
```

```
        }

        @Override
        public void actionPerformed(ActionEvent e) {
            // TODO Auto-generated method stub
             String actioncommand= e.getActionCommand();
            System.out.println(actioncommand);

            if(actioncommand.equals("Students")){
                ManageStudent Manage_Student= new ManageStudent();
                Manage_Student.setVisible(true);
            }
             if(actioncommand.equals("Courses")){
                ManageCourse Manage_Course= new ManageCourse();
                Manage_Course.setVisible(true);

            }

        }

}
```

--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--

- Manage Students:

```
package java2project;

import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;



public class ManageStudent extends JFrame implements ActionListener{

        public ManageStudent(){



                this.setTitle("Manage Student Window");
                this.setSize(400,350);
                this.setDefaultCloseOperation(HIDE_ON_CLOSE);
                this.setLayout(new BorderLayout() );

```

```
                // menu
                JMenu Manage= new JMenu("MANAGE STUDENTS");
                this.add(Manage);

                //menu item
                JMenuItem Add_Students = new JMenuItem("Add New Students");
                Add_Students.addActionListener(this);
                JMenuItem Display_Students= new JMenuItem("Display
    Students");
                Display_Students.addActionListener(this);
                JMenuItem Add_Course= new JMenuItem("Add Course");
                Add_Course.addActionListener(this);

                Manage.add(Add_Students);
                Manage.add(Display_Students);
                Manage.add(Add_Course);


                //menu bar
                JMenuBar menuBar= new JMenuBar();

                this.setJMenuBar(menuBar);
            //      this.add(menuBar);
                menuBar.add(Manage);


                //icon
```

```
                ImageIcon JUC_icon= new ImageIcon("juc.png");
                JLabel JUC_label=new JLabel(JUC_icon);
                //this.add(JUC_label);



                //massage
                JLabel JUC_text=new JLabel("welcome to JUC online services");
                //this.add(JUC_text);



                //font
                JUC_text.setFont (new Font ("TimesRoman", Font.BOLD |
Font.ITALIC, 17));



                //panel
                JPanel Panel1 = new JPanel(new FlowLayout());
                Panel1.add(menuBar);
                JPanel Panel2 = new JPanel(new FlowLayout());
                Panel2.add(JUC_text);
                Panel2.add(JUC_label);

                 //adding to the frame
```

```
                this.add(Panel1,BorderLayout.NORTH);
                this.add(Panel2,BorderLayout.CENTER);


        }

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub


                String actioncommand= e.getActionCommand();


                if(actioncommand.equals("Add New Students")){
                  System.out.println("Manage");
                   AddStudents Add_Students= new AddStudents();
                   Add_Students.setVisible(true);
                }
                if(actioncommand.equals("Display Students")){
                   DisplayStudents Display_Students= new DisplayStudents();
                   Display_Students.setVisible(true);
                }

                if(actioncommand.equals("Add Course")){
                   AddCourse Add_Course= new AddCourse();
                   Add_Course.setVisible(true);
```

```
                    }
                }

        }
```

--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--

Manage Courses:

```
package java2project;

import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;



public class ManageCourse extends JFrame implements ActionListener{


    public ManageCourse() {

        this.setTitle("Manage Course Window");
        this.setSize(400,350);
```

```
        this.setDefaultCloseOperation(HIDE_ON_CLOSE);
        this.setLayout(new BorderLayout());

        // menu
        JMenu Manage= new JMenu("MANAGE COURSES");

        this.add(Manage);

        //menu item
        JMenuItem Add_Course = new JMenuItem("Add New Course");
        Add_Course.addActionListener(this);
        JMenuItem Display_Courses= new JMenuItem("Display Courses");
        Display_Courses.addActionListener(this);


        Manage.add(Add_Course);
        Manage.add(Display_Courses);



        //menu bar
        JMenuBar menuBar= new JMenuBar();

        this.setJMenuBar(menuBar);
//      this.add(menuBar);
        menuBar.add(Manage);

```

```
        //icon

        ImageIcon JUC_icon= new ImageIcon("juc.png");
        JLabel JUC_label=new JLabel(JUC_icon);
        //this.add(JUC_label);



        //massage
        JLabel JUC_text=new JLabel("welcome to JUC online services");
        //this.add(JUC_text);



        //font
        JUC_text.setFont (new Font ("TimesRoman", Font.BOLD | Font.ITALIC,
17));



        //panel
        JPanel Panel1 = new JPanel(new FlowLayout());
        Panel1.add(menuBar);
        JPanel Panel2 = new JPanel(new FlowLayout());
        Panel2.add(JUC_text);
        Panel2.add(JUC_label);
```

```
            //adding to the frame
             this.add(Panel1,BorderLayout.NORTH);
             this.add(Panel2,BorderLayout.CENTER);


}

        @Override
        public void actionPerformed(ActionEvent e) {

                String actioncommand= e.getActionCommand();
            //System.out.println(actioncommand);

            if(actioncommand.equals("Add New Course")){
                AddNewCourse Add_New_Course= new AddNewCourse();
                Add_New_Course.setVisible(true);
            }
            if(actioncommand.equals("Display Courses")){
                DisplayCourses Display_Courses= new DisplayCourses();
                Display_Courses.setVisible(true);

          }
        }
}

--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--
```

- Add Student:

```
package java2project;

        import java.awt.*;
        import java.awt.event.ActionEvent;
        import java.awt.event.ActionListener;
        import java.io.*;
        import javax.swing.*;



public class AddStudents extends JFrame implements ActionListener{

        JLabel info;
   JTextField text1, text2 ,dayText , monthText, yearText, text4 ,text5,text6,text7;

   public AddStudents(){

      super("Add Students");
      setSize(400,500);
      this.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
      setLocationRelativeTo(null);
      setLayout(null);
```

```
JLabel lbl= new JLabel("Add New Student");
Font Title_Font = new Font("Cambria", Font.BOLD, 28);
lbl.setFont(Title_Font);
lbl.setBounds(70,20,250,50);
add(lbl);

Font Label_Font = new Font("Cambria", Font.BOLD, 14);

info= new JLabel("");
info.setForeground(Color.RED);
info.setFont(Label_Font);
info.setBounds(50,80,320,50);
add(info);

//First name * , Last name*, Birthdate*, ID*,address, major, and Phone
JLabel l1= new JLabel("First Name*",SwingConstants.RIGHT);
l1.setFont(Label_Font);
l1.setBounds(70,120,90,50);
text1 = new JTextField(10);
text1.setBounds(160,130,150,30);

JLabel l2= new JLabel("Last Name*",SwingConstants.RIGHT);
l2.setFont(Label_Font);
```

```
l2.setBounds(70,160,90,50);
text2 = new JTextField(10);
text2.setBounds(160,170,150,30);

JLabel l3= new JLabel("Birthdate*",SwingConstants.RIGHT);
l3.setFont(Label_Font);
l3.setBounds(70,200,80,50);
dayText = new JTextField(4);
dayText.setBounds(160,210,35,30);
monthText = new JTextField(4);
monthText.setBounds(205,210,35,30);
yearText = new JTextField(4);
yearText.setBounds(255,210,55,30);

JLabel l4= new JLabel("ID*",SwingConstants.RIGHT);
l4.setFont(Label_Font);
l4.setBounds(70,240,80,50);
text4 = new JTextField(10);
text4.setBounds(160,250,150,30);

JLabel l5= new JLabel("Address",SwingConstants.RIGHT);
l5.setFont(Label_Font);
l5.setBounds(70,280,80,50);
text5 = new JTextField(10);
text5.setBounds(160,290,150,30);
```

```
JLabel l6= new JLabel("Phone",SwingConstants.RIGHT);
l6.setFont(Label_Font);
l6.setBounds(70,320,80,50);
text6 = new JTextField(10);
text6.setBounds(160,330,150,30);


JLabel l7= new JLabel("Major*",SwingConstants.RIGHT);
l7.setFont(Label_Font);
l7.setBounds(70,360,80,50);
text7 = new JTextField(10);
text7.setBounds(160,370,150,30);


add(l1);
add(text1);
add(l2);
add(text2);
add(l3);
add(dayText);
add(monthText);
add(yearText);
add(l4);
```

```
    add(text4);
    add(l5);
    add(text5);
    add(l6);
    add(text6);
    add(l7);
    add(text7);

    JButton add_btn = new JButton("Add");
    add_btn.addActionListener(this);
    add_btn.setBounds(230,410,80,30);

    add(add_btn);

    JLabel msg2 = new JLabel("field with an * must be filled");
    msg2.setBounds(100, 400, 250, 100);
    add(msg2);

}

public void actionPerformed(ActionEvent e){
    // read all data from gui
    String fname = text1.getText().trim();
    String lname = text2.getText().trim();
    String day = dayText.getText().trim();
```

```
        String month = monthText.getText().trim();
        String year = yearText.getText().trim();
        String id = text4.getText().trim();
        String address = text5.getText().trim();
        String phone = text6.getText().trim();
        String maj = text7.getText().trim();
        String birth= "";



        if (fname.equals("") || lname.equals("") || id.equals("") || day.equals("") ||
month.equals("") || year.equals("") || maj.equals("")){
            info.setText("Warning! Information is incomplete, data is required to add
student");
        }
        else{

            int dayNo = Integer.parseInt(day);
            int monthNo =Integer.parseInt( month);
            int yearNo = Integer.parseInt(year);

            boolean d = true , m = true , y=true;

            if(dayNo<1||dayNo>31)
                d = false;
            if (monthNo<1 || monthNo>12)
```

```
            m = false;
        if(yearNo < 1970 || yearNo >2005)
            y = false;

        if(y && m && d){
            birth = dayNo+"-"+monthNo+"-"+yearNo;


            PrintWriter outPutStream = null;
            try
            {
                outPutStream = new PrintWriter(new
FileOutputStream("Student.txt",true));

outPutStream.println(fname+","+lname+","+birth+","+id+","+address+","+
phone+","+maj);
                outPutStream.close();
                info.setText("Student added successfully..");
            }
            catch(FileNotFoundException ex)
            {
                System.out.println("Error opening the file student.txt "+
ex.getMessage());
                info.setText("File Student does not exist..");
            }
```

```
            }

        else
            info.setText("Not Correct date..");


        }


   }
        }
--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--
```

- Add New Course:

```
package java2project;

    import java.awt.*;
    import java.awt.event.ActionEvent;
    import java.awt.event.ActionListener;
    import java.io.*;
    import javax.swing.*;
```

```
public class AddNewCourse extends JFrame implements ActionListener{

    JLabel message;
    JTextField text1, text2, text3 , text4;

    public AddNewCourse(){

        super("Add New Course");
        setSize(400,500);
        this.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
        setLocationRelativeTo(null);
        setLayout(null);


        JLabel lbl= new JLabel("Add New Course");
        Font Title_Font = new Font("Cambria", Font.BOLD, 28);
        lbl.setFont(Title_Font);
        lbl.setBounds(70,20,300,50);
        add(lbl);

        Font Label_Font = new Font("Cambria", Font.BOLD, 14);

        message= new JLabel("");
        message.setForeground(Color.RED);
        message.setFont(Label_Font);
        message.setBounds(50,80,320,50);
        add(message);
```

```
JLabel l1= new JLabel("Course Code*",SwingConstants.RIGHT);
l1.setFont(Label_Font);
l1.setBounds(30,120,120,50);
text1 = new JTextField(10);
text1.setBounds(160,130,150,30);

JLabel l2= new JLabel("Course Name*",SwingConstants.RIGHT);
l2.setFont(Label_Font);
l2.setBounds(30,160,120,50);
text2 = new JTextField(10);
text2.setBounds(160,170,150,30);

JLabel l3= new JLabel("Credit Hours*",SwingConstants.RIGHT);
l3.setFont(Label_Font);
l3.setBounds(30,200,120,50);
text3 = new JTextField(10);
text3.setBounds(160,210,150,30);

JLabel l4= new JLabel("Contact Hours*",SwingConstants.RIGHT);
l4.setFont(Label_Font);
l4.setBounds(30,240,120,50);
text4 = new JTextField(10);
text4.setBounds(160,250,150,30);
```

```
        add(l1);
        add(text1);
        add(l2);
        add(text2);
        add(l3);
        add(text3);
        add(l4);
        add(text4);


        JButton addButton = new JButton("Add");
        addButton.setBounds(230,290,80,30);
        addButton.addActionListener(this);
        add(addButton);

        JLabel msg2 = new JLabel("field with an * must be filled");
        msg2.setBounds(100, 350, 250, 100);
        add(msg2);

    }

    public void actionPerformed(ActionEvent e){

        // read all data from gui
        String code = text1.getText().trim();
        String name = text2.getText().trim();
        String creditHour = text3.getText().trim();
```

```
            String contactHour = text4.getText().trim();


            PrintWriter outPutStream = null;
            try
            {
               outPutStream = new PrintWriter(new
FileOutputStream("Course.txt",true));
               outPutStream.println(code+","+name+","+creditHour+","+contactHour);
               outPutStream.close();
               message.setText("Course added successfully!");
            }
            catch(FileNotFoundException ex)
            {
               System.out.println("Error opening the file Course.txt "+ ex.getMessage());
               message.setText("File Course does not exist..");
            }


         }


}
```

--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--

- Add Course:

```
package java2project;

        import java.awt.*;
        import java.awt.event.ActionEvent;
        import java.awt.event.ActionListener;
        import java.io.*;
        import javax.swing.*;


        public class AddCourse extends JFrame implements ActionListener{

            JLabel message;
            JTextField text1,text2;

            public AddCourse(){
                super("Add Course");
                setSize(400,400);
                this.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
                setLocationRelativeTo(null);
                setLayout(null);


                JLabel lbl= new JLabel("Add Course to Student");
                Font Title_Font = new Font("Cambria", Font.BOLD, 28);
                lbl.setFont(Title_Font);
                lbl.setBounds(50,20,350,50);
```

```
        add(lbl);

        Font Label_Font = new Font("Cambria", Font.BOLD, 14);

        message= new JLabel("");
        message.setForeground(Color.RED);
        message.setFont(Label_Font);
        message.setBounds(60,60,320,50);
        add(message);

        JLabel l1= new JLabel("Student ID*",SwingConstants.RIGHT);
        l1.setFont(Label_Font);
        l1.setBounds(30,100,120,50);
        text1 = new JTextField(10);
        text1.setBounds(160,110,150,30);

        JLabel l2= new JLabel("Course Code*",SwingConstants.RIGHT);
        l2.setFont(Label_Font);
        l2.setBounds(30,140,120,50);
        text2 = new JTextField(10);
        text2.setBounds(160,150,150,30);

        add(l1);
        add(text1);
        add(l2);
        add(text2);
```

```
        JButton add_btn = new JButton("Add Course");
        add_btn.setBounds(210,190,100,30);
        add_btn.addActionListener(this);
        add(add_btn);
    }

    public void actionPerformed(ActionEvent e){

        String std_name="";
        String std_id = text1.getText().trim();
        String code = text2.getText().trim();
        boolean f1 = false , f2 = false;

        // read from student and course files to check if already added.
        Scanner std_Stream = null , course_Stream = null;

        try{
            std_Stream = new Scanner(new FileInputStream("student.txt"));
            course_Stream = new Scanner(new
FileInputStream("Course.txt"));

            //search for student is vaild or not
            while(std_Stream.hasNextLine()){
                String line = std_Stream.nextLine();
                String[] tokens = line.split(",");
                if (tokens[3].equals(std_id)){
                    f1 = true;
```

```
                    std_name = tokens[0]+" "+tokens[1];
                    break;
                }// end if
            } // end while loop


            //search for course is vaild or not
            while(course_Stream.hasNextLine()){
                String line = course_Stream.nextLine();
                String[] tokens = line.split(",");
                if (tokens[0].equals(code)){
                    f2 = true;
                    break;
                }// end if
            } // end while

        } // end try
        catch (FileNotFoundException ex){
            System.out.println("Files not found");
            message.setText("Files are not exist.. check it");
        }


        if (f2 &&  f1){
            PrintWriter outStream = null;
            try
```

```
                    {
                        outStream = new PrintWriter(new
FileOutputStream("StudentCourse.txt",true));
                        outStream.println(std_id+","+std_name+","+code);
                        outStream.close();
                        message.setText("Course addedd successfully to a Student");
                    }
                    catch(FileNotFoundException ex)
                    {
                        System.out.println("Error opening the file studentCourse.txt "+
ex.getMessage());
                        message.setText("File studentCourse does not exist..");
                    }

                }// end if
                else
                {
                    message.setText("Check your student Id and Course Code");
                } //end else



            } // end action perform

        }
```

--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--

- Display Student:

```
package java2project;

        import java.awt.*;
        import java.awt.event.ActionEvent;
        import java.awt.event.ActionListener;
        import java.io.*;
        import java.util.Scanner;
        import javax.swing.*;

        public class DisplayStudents extends JFrame implements ActionListener{

            JTextField text1;
            JTextArea area;
            public DisplayStudents(){
                super("Display Students");
                setSize(400,400);
                this.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
                setLocationRelativeTo(null);
                setLayout(null);
```

```
        //title
        JLabel lbl= new JLabel("Display Students");
        Font Title_Font = new Font("Cambria", Font.BOLD, 28);
        lbl.setFont(Title_Font);
        lbl.setBounds(70,20,250,50);
        add(lbl);

        Font Label_Font = new Font("Cambria", Font.BOLD, 14);

        //enter major name
        JLabel l1= new JLabel("Course Code:",SwingConstants.RIGHT);
        l1.setFont(Label_Font);
        l1.setBounds(30,70,120,50);
        text1 = new JTextField(10);
        text1.setBounds(160,80,150,30);
        text1.addActionListener(this);
        add(l1);
        add(text1);

        area = new JTextArea(15,30);
        JScrollPane scrolledText = new JScrollPane(area);
        scrolledText.setBounds(50,140,300,150);

scrolledText.setVerticalScrollBarPolicy(JScrollPane.VERTICAL_SCROLLBAR_ALWAYS);
        scrolledText.setHorizontalScrollBarPolicy(
JScrollPane.HORIZONTAL_SCROLLBAR_ALWAYS);
```

```
                add(scrolledText);


                JButton back_btn = new JButton("Back");
                back_btn.setBounds(160,300,80,30);

                add(back_btn);
            }

            public void actionPerformed(ActionEvent e){
                String code = text1.getText();
                String names = "";


                 Scanner inputStream = null;
                // read StudentCourse file
                try{
                    inputStream = new Scanner(new
FileInputStream("StudentCourse.txt"));
                    while(inputStream.hasNextLine()){
                        String line = inputStream.nextLine();
                        String[] tokens = line.split(",");
                        if (tokens[2].equals(code)){
                            names += "\t"+tokens[1]+"\n";
                        }// end if

                    }//end while
```

```
                area.setText(names);

            }
            catch (FileNotFoundException ex){
                System.out.println("File studentCourse.txt was not found");
            }

        }

    }
```

--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--

Display Courses:

```
package java2project;

    import java.awt.*;
    import java.io.*;
    import java.util.Scanner;
    import javax.swing.*;


    public class DisplayCourses extends JFrame{

```

```
    JTextArea area ;
    public DisplayCourses(){
        super("Display Courses");
        setSize(400,400);
        setLocationRelativeTo(null);
        this.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);

        setLayout(null);

        //title
        JLabel lbl= new JLabel("Display All Courses");
        Font Title_Font = new Font("Cambria", Font.BOLD, 24);
        lbl.setFont(Title_Font);
        lbl.setBounds(80,20,250,50);
        add(lbl);

        Font Label_Font = new Font("Cambria", Font.BOLD, 14);

        area = new JTextArea(15,150);
        JScrollPane scrolledText = new JScrollPane(area);
        scrolledText.setBounds(70,80,250,200);

scrolledText.setVerticalScrollBarPolicy(JScrollPane.VERTICAL_SCROLLBAR_ALWAYS);
        scrolledText.setHorizontalScrollBarPolicy(
JScrollPane.HORIZONTAL_SCROLLBAR_ALWAYS);
        add(scrolledText);
```

```
        JButton back_btn = new JButton("Back");
        back_btn.setBounds(150,300,80,30);

        add(back_btn);

        // read all course from Course File
        Scanner inputStream = null;
        // read admin from a file
        try{
            inputStream = new Scanner(new FileInputStream("Course.txt"));

            String course_data="";
            //read all file
            while(inputStream.hasNextLine()){
                String line = inputStream.nextLine();
                String[] tokens = line.split(",");
                course_data += tokens[0]+"\t"+tokens[1]+"\n";
            } // end while loop

            area.setText(course_data);

        }
        catch (FileNotFoundException ex){
            System.out.println("File Course.txt was not found");
        }
```

-
-
- }
-
- }

--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--

- Admin Login Window:

```
package java2project;

import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.util.Arrays;
import javax.swing.*;

public class adminLoginWindow extends JFrame implements ActionListener {

    private JTextField userNameText;
    private JPasswordField passWordText;
    private JLabel message;

        public adminLoginWindow () {
```

```
        //window 1

        this.setTitle("Admin Login Window");
        this.setSize(400,200);
        this.setDefaultCloseOperation(EXIT_ON_CLOSE);
        this.setLayout(new BorderLayout());

         // labels
JLabel login = new JLabel("Login Page");
JLabel userNamelbl = new JLabel("User Name:");
JLabel passlbl = new JLabel("Paswword:");
 message = new JLabel("Message:");


// initializing the textfields
userNameText = new JTextField();
passWordText = new JPasswordField();

// buttons
JButton submit = new JButton("Submit");
submit.addActionListener(this);
JButton clear = new JButton("Clear");
clear.addActionListener(this);


//font
login.setFont (new Font ("TimesRoman", Font.BOLD | Font.ITALIC, 17));
```

```
JPanel northPanel = new JPanel(new FlowLayout());
northPanel.add(login);


JPanel centerPanel = new JPanel(new GridLayout(3,1));
centerPanel.add(userNamelbl);
centerPanel.add(userNameText);
centerPanel.add(passlbl);
centerPanel.add(passWordText);
centerPanel.add(submit);
centerPanel.add(clear);

//JPanel southPanel = new JPanel(new GridLayout(1,1));



//adding to the frame
add(northPanel,BorderLayout.NORTH);
add(centerPanel,BorderLayout.CENTER);
add(message,BorderLayout.SOUTH) ;
//add(southPanel,BorderLayout.SOUTH);


 }
```

```
        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub

                 String command = e.getActionCommand();

               char [] pass = passWordText.getPassword();
               char [] myPass = {'4','2','1'};

               if (command.equals("Submit")) {
                 // System.out.println("submit");
                  if (userNameText.getText().equals("manar") &&
Arrays.equals(pass,myPass)) {
                     //System.out.println(userNameText.equals("manar") &&
Arrays.equals(pass,myPass));
                     message.setText("Message : You are logged in Successfully");

                     mainWindow main_Window= new mainWindow();
                     main_Window.setVisible(true);
                  }
                  else {
                     //System.out.println("Sorry!! Check your username and password");
                     message.setText("Message : Sorry!! Check your username and
password");
                  }
```

```
            }

            else if (command.equals("Clear")) {
                userNameText.setText(null);
                passWordText.setText(null);
                message.setText(null);
            }

        }

}
```

--//-- --//-- --//-- --//-- --//-- --//-- --//-- --//-- --//--