Objectives:

* Chapter 10 inheritance.

Inheritance is a process of extending to other classes. Only the main class can run and call the sub classes from the main class.

**There are 3 challenge exercises, each worth 33.3%**

Create a class named c5

Graphical user interface, text, application

Description automatically generated

Create a class named c6 that extends c5

Graphical user interface, text

Description automatically generated

Create a class named c7 that will call- c5 and then c6

Graphical user interface, text

Description automatically generated

Test the application. Notice that since c6 extends c5 that, c5 gets called first, and then calls c6.

**Project #1**

Create a class without the main method, this will be our sub class.

A picture containing text

Description automatically generated

Text

Description automatically generated

Create a class with the main method, which we will call out sub class.

Graphical user interface, text, application

Description automatically generated

Test the application.

**Project #1 continuation**

Have the program enter a name, from the sub class add the following

Graphical user interface, text

Description automatically generated

From the main method call the accessors and mutator

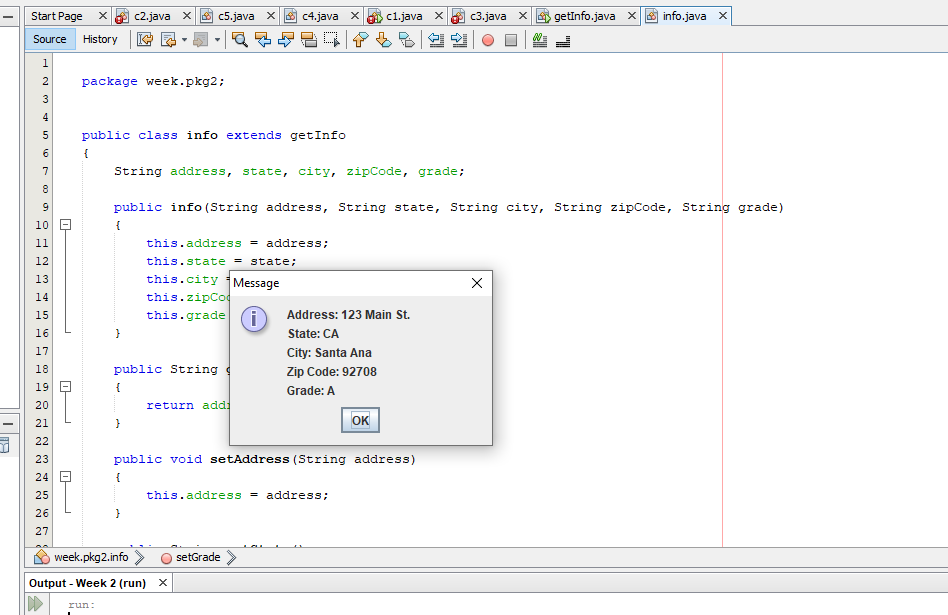
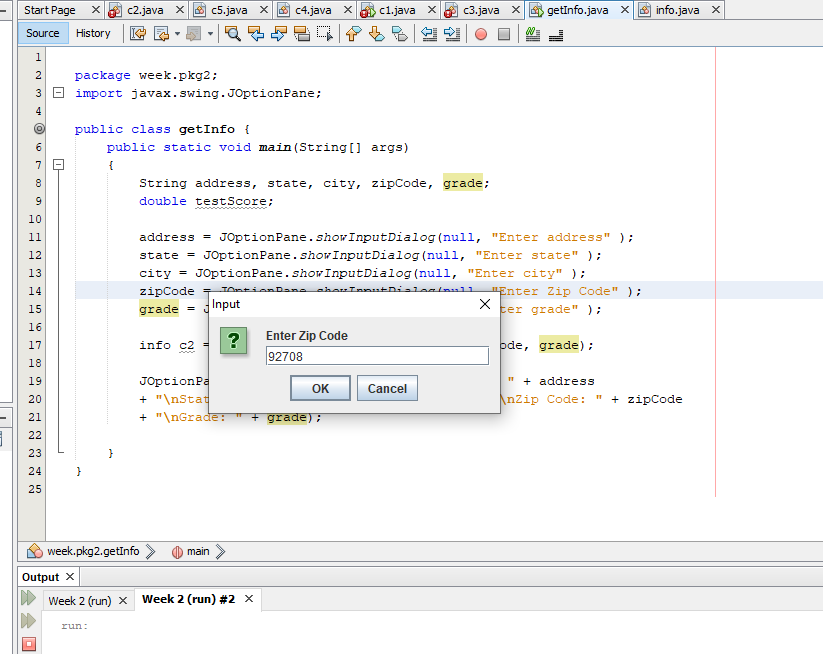
Graphical user interface, text, application

Description automatically generated

Test the application.

**Challenge Exercise #1:** the program will ask the user to enter the address, city, state, zip code, and grade.

**#1 print screen the output with code from both classes below here.**



**Project #2**

Use the extends keyword to inherit from the c2 class

Text

Description automatically generated

Main method

Graphical user interface, text, application

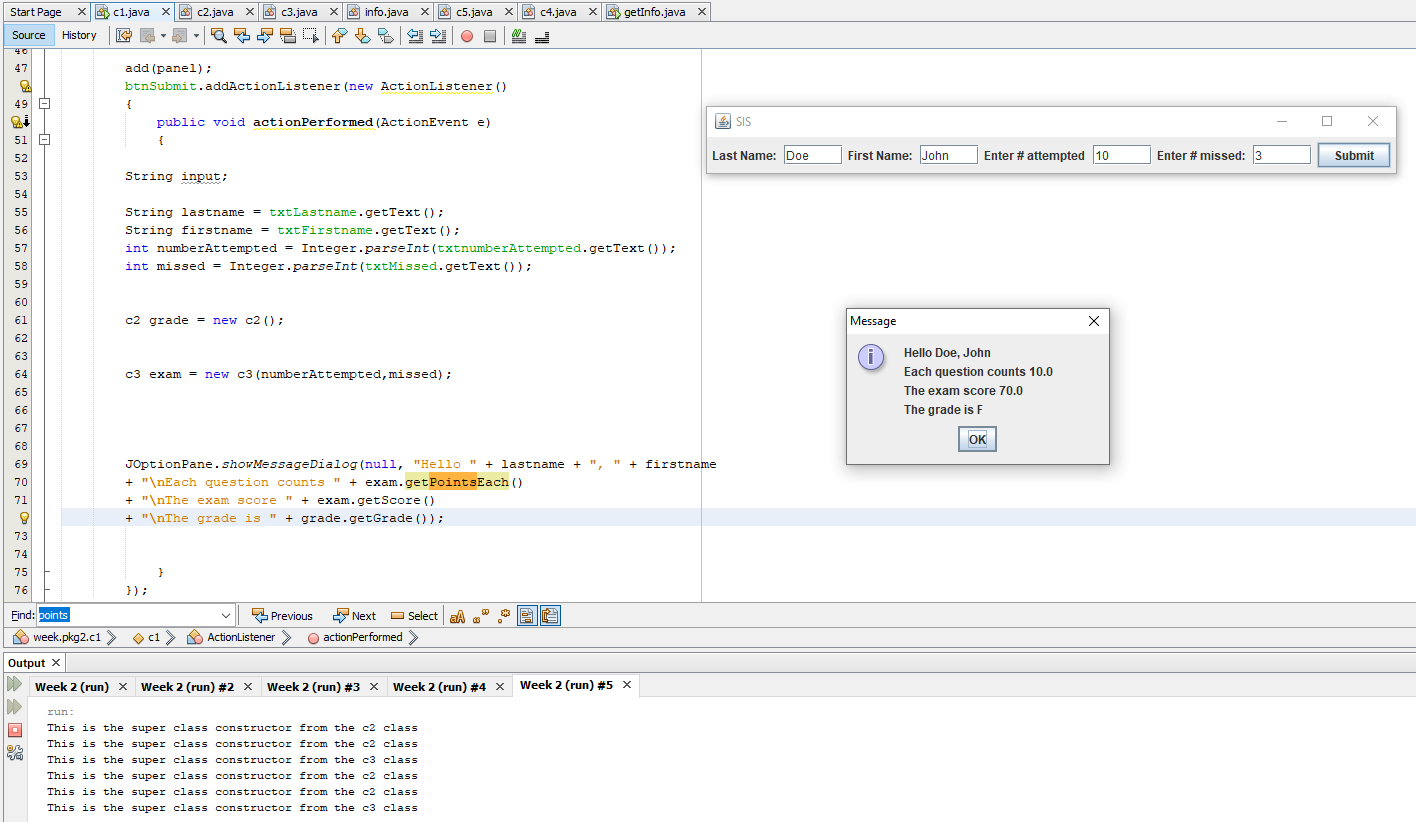
Description automatically generated

Test the application.

**Delete or comment out the extends keyword and see what happens.**

**Challenge Exercise #2:** Create a JFrame that will allow the user to enter the students last and first name, # of questions attempted and # of questions missed, and get the output. Remember to use the c2 and c3 classes.

**#2 print screen the output with code from all classes below here.**



**Project #3**

Get the name, hours worked, hourly pay and retrieve the name and total, use two classes.

Create the class c8

Graphical user interface, text, application

Description automatically generatedGraphical user interface, text, application, email

Description automatically generated

The main method class.

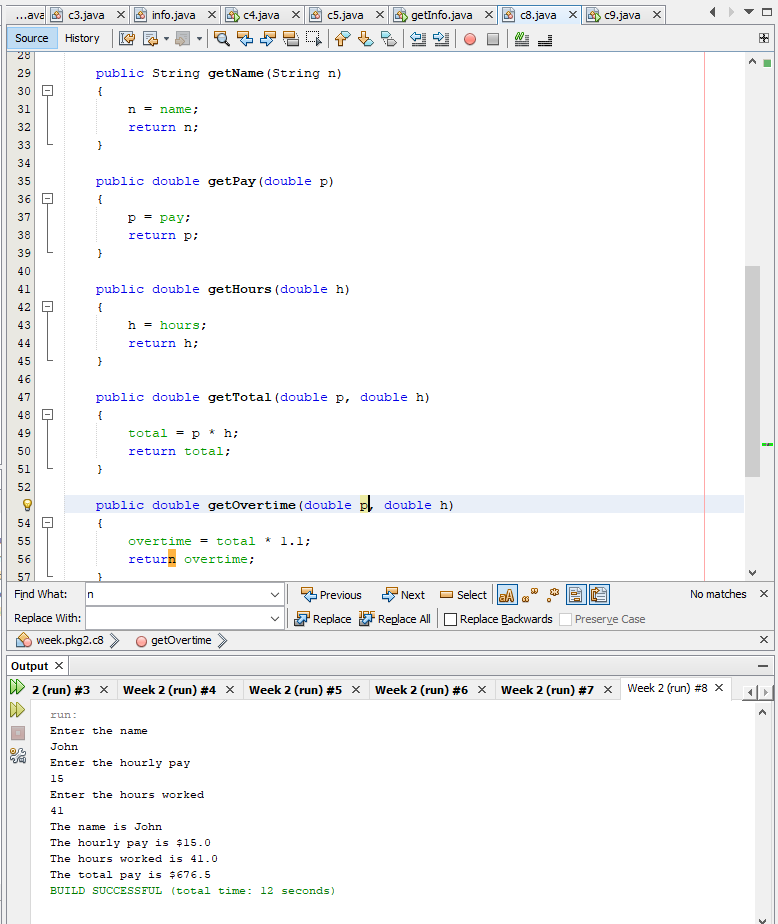
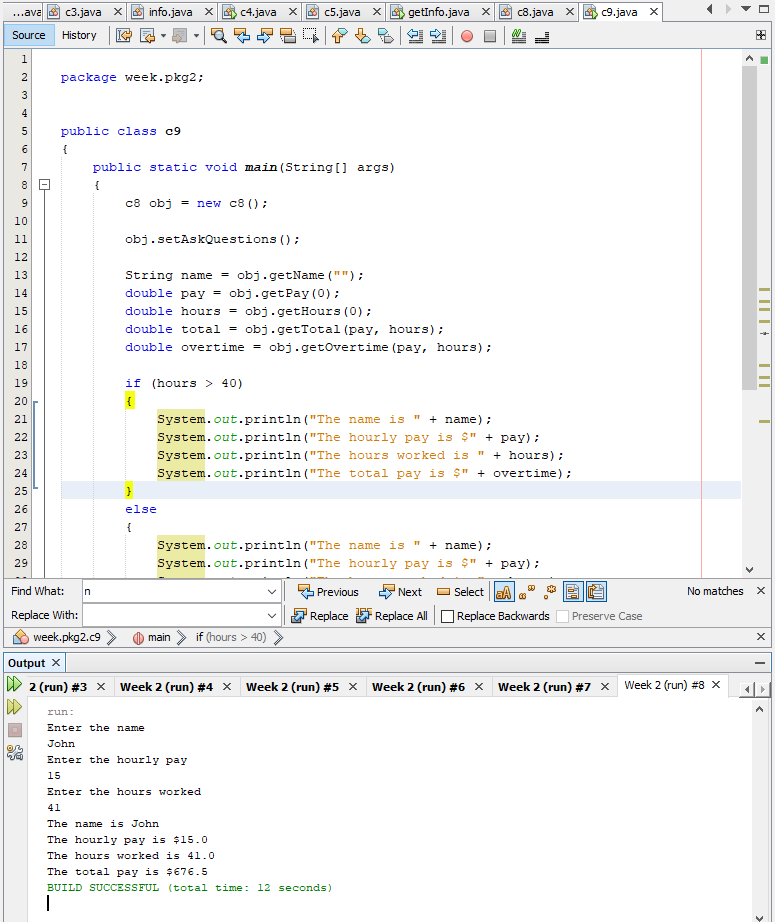
Text

Description automatically generated

Test the application.

**Challenge Exercise #3:** Continuing with project #3, use an if statement, if the hours worked is over 40 hours than add a 10% to the total.

**#3 print screen the output with code from all classes below here.**



**Submit this document to Module 2 class exercise.**