File Edit View Build Project Settings Tools Window Help

All Files   Sort By Name

ers/allegra.adams/Documents/CS 2265/Java 4

BasePlusCommissionEmployee.java
CommissionEmployee.java
Date.java
Employee.java
HourlyEmployee.java
PayrollSystemTest.java
SalariedEmployee.java

Open Projects

Java 4 /Users/allegra.adams/Documents/CS 2
  <UML>
  Source Files
      BasePlusCommissionEmployee.java
      CommissionEmployee.java
      Date.java *
      Employee.java
      HourlyEmployee.java
      PayrollSystemTest.java
      SalariedEmployee.java

Browse Find Debug Workbench

```java
// Date.java

// Date class declaration.


public class Date

{

    private int month; // 1-12

    private int day;   // 1-31 based on month

    private int year;  // any year


    // constructor: call checkMonth to confirm proper value for month
    // call checkDay to confirm proper value for day

    public Date( int theMonth, int theDay, int theYear )
```

Date.j... Emplo... Com... BasePl... Hourl... Salari... Payrol... [Gras...

Compile Messages jGRASP Messages Run I/O Interactions

Stop
Clear
Copy

```
    ----jGRASP: operation complete.

    ----jGRASP exec: javac -g @Java 4_source_files_8155818

    ----jGRASP: operation complete.
```

Line:14 Col:1 Code:0 Top:1 OVS BLK

//

Date.java

```java
public int getMonth() {
        return month;
    }
    public int getDay() {
        return day;
    }
    public int getYear() {
        return year;
    }


// Employee.java
    private Date birthDate;
// set birth date
    public void setBirthDate( Date bday )
    {
        birthDate = bday;
    } // end method setBirthDate
// return birth date
    public Date getBirthDate()
    {
        return birthDate;
    } // end method getBirthDate
// return String representation of Employee object
    public String toString()
    {
```

```java
      return String.format( "%s %s\nsocial security number: %s",
         getFirstName(), getLastName(),
getSocialSecurityNumber(), getBirthDate() );
   } // end method toString
```

// CommissionEmployee.java
```java
  // five-argument constructor
   public CommissionEmployee( String first, String last, String
ssn,Date bday,
      double sales, double rate )
{
      super( first, last, ssn, bday );
```

// BasePlusCommissionEmployee.java
```java
 // six-argument constructor
   public BasePlusCommissionEmployee( String first, String last,
      String ssn, Date bday, double sales, double rate, double
salary )
   {
      super( first, last, ssn, bday, sales, rate );
```

// HourlyEmployee.java
```java
 // five-argument constructor

   public HourlyEmployee( String first, String last, String
ssn,Date bday,
      double hourlyWage, double hoursWorked )
   {
      super( first, last, ssn, bday );
```

// SalariedEmployee.java
// four-argument constructor
```java
   public SalariedEmployee( String first, String last, String
ssn,Date bday,
      double salary )
   {
      super( first, last, ssn, bday ); // pass to Employee
constructor
```

// PayrollSystemTest.java

// Employee hierarchy test program.
```java
import javax.swing.JOptionPane;


public class PayrollSystemTest
```

```java
{

   public static void main( String args[] )

   {

      for(int count = 1; count <= 5; count++)
   {

      String empTypeString;
      int empType;
      empTypeString=JOptionPane.showInputDialog(null,"Enter
Employee Type: \n (0-Salaried; 1-Hourly; 2-Commisioned; 3-
BasePlus)","Employee Type",JOptionPane.QUESTION_MESSAGE);
      empType = Integer.parseInt(empTypeString);
    switch(empType)
   {

  case 0:
     String firstName;
     firstName=JOptionPane.showInputDialog(null,"Enter First
Name:  ","First Name",JOptionPane.QUESTION_MESSAGE);

     String lastName;
     lastName=JOptionPane.showInputDialog(null,"Enter Last Name:
","Last Name",JOptionPane.QUESTION_MESSAGE);

     String monthString;
     int month;
     monthString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (MONTH):  ","Month",JOptionPane.QUESTION_MESSAGE);
     month=Integer.parseInt(monthString);

     String dayString;
     int day;
     dayString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (DAY):  ","Day",JOptionPane.QUESTION_MESSAGE);
     day=Integer.parseInt(dayString);

     String yearString;
     int year;
     yearString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (YEAR):  ","Year",JOptionPane.QUESTION_MESSAGE);
     year=Integer.parseInt(yearString);
```

```java
        Date birthDate;
        birthDate=new Date(month, day, year);

        String socialSecurityNumber;

socialSecurityNumber=JOptionPane.showInputDialog(null,"Enter
Social Security Number:  ","Social Security
Number",JOptionPane.QUESTION_MESSAGE);

        String salaryString;
        double salary;
        salaryString=JOptionPane.showInputDialog(null,"Enter Weekly
Salary:  ","Salary",JOptionPane.QUESTION_MESSAGE);
        salary=Double.parseDouble(salaryString);
                break;
    case 1:

        firstName=JOptionPane.showInputDialog(null,"Enter First
Name:  ","First Name",JOptionPane.QUESTION_MESSAGE);

        lastName=JOptionPane.showInputDialog(null,"Enter Last Name:
","Last Name",JOptionPane.QUESTION_MESSAGE);

        monthString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (MONTH):  ","Month",JOptionPane.QUESTION_MESSAGE);
        month=Integer.parseInt(monthString);

        dayString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (DAY):  ","Day",JOptionPane.QUESTION_MESSAGE);
        day=Integer.parseInt(dayString);


        yearString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (YEAR):  ","Year",JOptionPane.QUESTION_MESSAGE);
        year=Integer.parseInt(yearString);


        birthDate=new Date(month, day, year);



socialSecurityNumber=JOptionPane.showInputDialog(null,"Enter
Social Security Number:  ","Social Security Number",
JOptionPane.QUESTION_MESSAGE);
```

```java
        String wageString;
        double wage;
        wageString=JOptionPane.showInputDialog(null,"Enter Hourly
Wage:  ","Wage",JOptionPane.QUESTION_MESSAGE);
        wage=Double.parseDouble(wageString);

        String hoursString;
        int hours;
        hoursString=JOptionPane.showInputDialog(null,"Enter Weekly
Hours:  ","Hours",JOptionPane.QUESTION_MESSAGE);
        hours=Integer.parseInt(hoursString);
                break;
    case 2:

        firstName=JOptionPane.showInputDialog(null,"Enter First
Name:  ","First Name",JOptionPane.QUESTION_MESSAGE);


        lastName=JOptionPane.showInputDialog(null,"Enter Last Name:
","Last Name",JOptionPane.QUESTION_MESSAGE);

        monthString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (MONTH):  ","Month",JOptionPane.QUESTION_MESSAGE);
        month=Integer.parseInt(monthString);

        dayString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (DAY):  ","Day",JOptionPane.QUESTION_MESSAGE);
        day=Integer.parseInt(dayString);

        yearString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (YEAR):  ","Year",JOptionPane.QUESTION_MESSAGE);
        year=Integer.parseInt(yearString);

        birthDate=new Date(month, day, year);


socialSecurityNumber=JOptionPane.showInputDialog(null,"Enter
Social Security Number:  ","Social Security Number",
JOptionPane.QUESTION_MESSAGE);

        String salesString;
        Double sales;
        salesString=JOptionPane.showInputDialog(null,"Enter Weekly
Sales:  ", "Gross Sales", JOptionPane.QUESTION_MESSAGE);
        sales=Double.parseDouble(salesString);
```

```java
        String rateString;
        Double rate;
        rateString=JOptionPane.showInputDialog(null,"Enter
Commission Percentage:  ", "Commision Rate",
JOptionPane.QUESTION_MESSAGE);
        rate=Double.parseDouble(rateString);
                break;

    case 3:

        firstName=JOptionPane.showInputDialog(null,"Enter First
Name:  ","First Name",JOptionPane.QUESTION_MESSAGE);

        lastName=JOptionPane.showInputDialog(null,"Enter Last Name:
","Last Name",JOptionPane.QUESTION_MESSAGE);

        monthString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (MONTH):  ","Month",JOptionPane.QUESTION_MESSAGE);
        month=Integer.parseInt(monthString);

        dayString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (DAY):  ","Day",JOptionPane.QUESTION_MESSAGE);
        day=Integer.parseInt(dayString);

        yearString=JOptionPane.showInputDialog(null,"Enter Date of
Birth (YEAR):  ","Year",JOptionPane.QUESTION_MESSAGE);
        year=Integer.parseInt(yearString);

        birthDate=new Date(month, day, year);


socialSecurityNumber=JOptionPane.showInputDialog(null,"Enter
Social Security Number:  ","Social Security Number",
JOptionPane.QUESTION_MESSAGE);

        salesString=JOptionPane.showInputDialog(null,"Enter Weekly
Sales:  ", "Gross Sales", JOptionPane.QUESTION_MESSAGE);
        sales=Double.parseDouble(salesString);

        rateString=JOptionPane.showInputDialog(null,"Enter
Commission Percentage:  ", "Commision Rate",
JOptionPane.QUESTION_MESSAGE);
        rate=Double.parseDouble(rateString);

String baseString;
```

```java
Double base;
    baseString=JOptionPane.showInputDialog(null,"Enter Base
Salary:  ", "Base Salary", JOptionPane.QUESTION_MESSAGE);
    base=Double.parseDouble(baseString);
            break;
  }
  }
 // generically process each element in array employees

    for ( Employee currentEmployee : employees )

    {

        System.out.println( currentEmployee ); // invokes
toString

        int currentMonth =
currentEmployee.getBirthDate().getMonth();
        if (currentMonth == 11) {
            if (currentEmployee instanceof SalariedEmployee)
{
                SalariedEmployee employee =
(SalariedEmployee) currentEmployee;
                double oldSalary =
employee.getWeeklySalary();
                employee.setWeeklySalary(4 * oldSalary +
100);
                System.out
                    .printf("$100 bonus if birthday is in
current month: $%,.2f\n",
                            employee.getWeeklySalary());
            }
```

Employee Type

Enter Employee Type:
(0-Salaried; 1-Hourly; 2-Commisioned; 3-BasePlus)

`0`

Cancel   OK

First Name

Enter First Name:

`Joe`

Cancel   OK

Last Name

Enter Last Name:

`Smoe`

Cancel   OK

Social Security Number

Enter Social Security Number:

`111111111`

Cancel   OK

Month

Enter Date of Birth (MONTH):

`1`

Cancel   OK

Day

Enter Date of Birth (DAY):

`1`

Cancel   OK

Year

Enter Date of Birth (YEAR):

`1960`

Cancel   OK

Salary

Enter Weekly Salary:

`1000`

Cancel   OK

Employee Type

Enter Employee Type:
(0-Salaried; 1-Hourly; 2-Commisioned; 3-BasePlus)

`0`

Cancel   OK

First Name

Enter First Name:

`Shirly`

Cancel   OK

Last Name

Enter Last Name:

`Wirley`

Cancel   OK

Social Security Number

Enter Social Security Number:

`222222222`

Cancel   OK

Month

Enter Date of Birth (MONTH):

`11`

Cancel   OK

Day

Enter Date of Birth (DAY):

`1`

Cancel   OK

Year

Enter Date of Birth (YEAR):

`1961`

Cancel   OK

Salary

Enter Weekly Salary:

`1000`

Cancel   OK

Employee Type

Enter Employee Type:
(0-Salaried; 1-Hourly; 2-Commisioned; 3-BasePlus)

2

Cancel   OK

First Name

Enter First Name:

Vinny

Cancel   OK

Last Name

Enter Last Name:

Pinny

Cancel   OK

Social Security Number

Enter Social Security Number:

333333333

Cancel   OK

Month

Enter Date of Birth (MONTH):

2

Cancel   OK

Day

Enter Date of Birth (DAY):

1

Cancel   OK

Year

Enter Date of Birth (YEAR):

1962

Cancel   OK

Gross Sales

Enter Weekly Sales:

12000

Cancel   OK

Commision Rate

Enter Commission Percentage:

5

Cancel   OK

Employee Type

Enter Employee Type:
(0-Salaried; 1-Hourly; 2-Commisioned; 3-BasePlus)

3

Cancel   OK

First Name

Enter First Name:

Bonny

Cancel   OK

Last Name

Enter Last Name:

Tonny

Cancel   OK

Month

Enter Date of Birth (MONTH):

3

Cancel   OK

Day

Enter Date of Birth (DAY):

1

Cancel   OK

Year

Enter Date of Birth (YEAR):

1963

Cancel   OK

Social Security Number

Enter Social Security Number:

444444444

Cancel   OK

Gross Sales

Enter Weekly Sales:

10000

Cancel   OK

Commision Rate

Enter Commission Percentage:

3

Cancel   OK

Salary

Enter Weekly Salary:

500

Cancel   OK

Employee Type

Enter Employee Type:
(0-Salaried; 1-Hourly; 2-Commisioned; 3-BasePlus)

`1`

Cancel   OK

First Name

Enter First Name:

`Gary`

Cancel   OK

Last Name

Enter Last Name:

`Tary`

Cancel   OK

Social Security Number

Enter Social Security Number:

`888888888`

Cancel   OK

Month

Enter Date of Birth (MONTH):

`4`

Cancel   OK

Enter Date of Birth (DAY):

`1`

Cancel   OK

Year

Enter Date of Birth (YEAR):

`1964`

Cancel   OK

Wage

Enter Hourly Wage:

`20`

Cancel   OK

Hours

Enter Weekly Hours:

`40`

Cancel   OK