Polymorphism and Inheritance

**Part 1**

Create an abstract class called **Employee**

This class must have the following private data

1. first name
2. last name
3. street address

This class must have the following methods

1. constructors
2. set and get methods for data
3. toString
4. an abstract method called payCheck that returns the amount of pay for the pay period

**Part 2**

Create a derived class called **Management**

This class must have the following private data

1. salary
2. bonus

This class must have the following methods

1. constructors
2. set and get methods for data
3. toString
4. payCheck

Management pay is salary + bonus

**Part 3**

Create a derived class called **Sales**

This class must have the following private data

1. sales
2. base pay

This class must have the following methods

1. constructors
2. set and get methods for data
3. toString
4. payCheck

Sales pay is base pay + commission

sales under $30,000 --- commission rate 1%

sales between $30,000 and $50,000 --- commission rate 1.5%

sales over $50,000 --- commission rate 4%

**Part 4**

Create a derived class called **Hourly**

This class must have the following private data

1. hours
2. wage rate

This class must have the following methods

1. constructors
2. set and get methods for data
3. toString
4. payCheck

hours over 40 get time and a half

**Part 5**

Create a class called **Payroll**.

This class must have the following private data

1. an ArrayList of Employees

This class must have the following methods

1. constructors
2. addEmployee
3. getEmployee
4. removeEmployee
5. toString (prints the payroll for the company)
6. totalPayroll (finds the total amount of money paid to employees)

**Part 6**

Write a client program to test these classes.