Inheritance Continued

Example: Payroll

- Identify the objects
    - Salaried Employees
    - Hourly Employees
- Look for shared attributes in those objects
    - Employee Id number
    - Name
    - Department

Example: Payroll (Continued)

- Define a base class containing the common data members:

```
class Employee {
    //Function Members
public:
    //... Employee methods
    //Data Members
protected:
long int myIdNumber;
string  LastName, FirstName;
char  MiddleInitial;
int DepartmentNumber;
    //... other data members common to all Employees
};
```

Example: Payroll (Continued)

- • From the base class, *derive* classes containing respective attributes:

```
//A salaried Employee class

class SalariedEmployee  :  public Employee
{
//   ... Method members
public:
//   ... Salaried employee methods
//Data members
protected:
   float mySalary;
};
```

Example: Payroll (Continued)

```
// An hourly Employee Class

class HourlyEmployee  :  public Employee
{
// ...  Method members
public:
// ...  Hourly employee methods

// ...  Data members
protected:
float  myHourlyWage, HoursWorked, myOvertimeFactor;
};
```