

Homework

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Virtual Workers Unite!

or this assignment, create an abstract base class Worker. Every worker has a name and an hourly rate (along with the appropriate accessor methods). The Worker class should have a pure virtual payInfo(int hours) function that returns the worker's name and computed salary as a formatted string.

Note: when defining your base class, please define the members in this order.

- Working constructor
- 2. Virtual destructor
- 3. getRate()
- 4. getName()
- 5. payInfo()

Create two derived concrete classes HourlyWorker and SalariedWorker.

- An **hourly worker** gets paid the hourly wage for the actual number of hours worked for the first **40** hours and time and a half for any hours over that.
- The salaried (aka "exempt") worker gets paid the hourly wage for 40 hours, no matter what the actual number of hours is.

The test program first creates four **Worker pointers**, and then points each to a different instance of a **derived** class. It then calls the **payInfo()** function for each worker, using different hours (less than and more than 40 hours).

Here's some sample output:

Sam (Hourly, \$ 20.00) worked 20 hours. Pay: \$ 400.00 Tom (Salaried, \$ 30.00) worked 20 hours. Pay: \$ 1200.00

Go ahead and implement that. Then do **make test**. If you haven't made any mistakes, **make submit** and you're done with this assignment.