



Class AbstractEmployee:

Integer amountDue() : Pre-condition: hours and rate are non-negative.

Post-condition: return value is non-negative.

Integer amountDue(int overtimeHours) : Pre-condition: overtime hours are non-negative.

Post-condition: return value is non-negative.

class: Management

- Class Supervisor: LSP holds. No methods violate the contract with base class. Neither Preconditions are strengthened, nor Postconditions are weakened.
- Class Dispatcher: LSP holds. No methods violate the contract with base class. Neither Preconditions are strengthened, nor Postconditions are weakened.
- Class Management: LSP holds. No methods violate the contract with base class. Neither Preconditions are strengthened, nor Postconditions are weakened.

class: Worker

- Class Cashier: LSP holds. No methods violate the contract with base class.

- Class WarehouseWorker: Violates LSP. In amountDue(int overtimeHours) function, when overtime hours is more than maximum overtime allowed, an exception will be thrown. Preconditions are strengthened.
- Class Driver: Violates LSP. amountDue(int overtimeHours) method will throw an illegal overtime exception.