Assignment 7 8 info

* 37 employees
* Family vacation
  + One family vacation
  + Up to ten family members
  + Per employee
* Vacation types
  + Ski resorts
  + Beach house
* Vacation requirement
  + Employee name
  + Location
  + Zip
    - Yyyyy-yyyy where Y is number
  + Number of family members who will go
* Beach house vacation
  + Base cost based on number of people going
    - 1-3 $196
    - 4-7 $306
    - 8-10 $524
  + Hurricane insurance
    - $9.50 per family member up to 5 family members
    - $4.75 for each additional member above 5
* Ski resort
  + Location rated 2, 3, or 4 stars
  + Flat fee based on number of stars
    - $308 per star
  + List containing the names of each family member who will go on the vacation
  + Whether they would like to have ski lessons or not
  + $49.95 is charged for each family member with ski lessons
* Vacation bill
  + Vacation type, and all information associated to the vacation
* Menu
  + Add Vacation
  + Remove Vacation
  + Print All Beach House Vacation Bills
  + Print All Ski Resort Vacation Bills
  + Print Vacation Summary
  + Quit
* Add vacation
  + User to select the type of vacation they wish to enter
  + Enter all info associated
  + No two vacation can have the same location
  + Vacations added in any order
  + Vacations must be stored in lexicographical order
  + If user already entered max, the limit of vacations that may be entered has been reached
* Remove vacation
  + List of employee names and select a vacation to remove
  + Maintain lexicographical order at all time
* Print all beach house vacation bills
  + Should print only the bills associated to beach house vacation
* Print all ski resort vacation bills
  + Should print only the bills associated to ski resort
* Print vacation summary
  + Listing the total number of vacations and the total vacation cost across all vacations
* Requirements
  + Abstraction, inheritance, and polymorphism