

NINTH QUIZ

You have 15 minutes from the start of class to complete this quiz. Read the questions with care; work with deliberate speed. Don't give us more than we ask for. The usual instructions apply. Good luck!

Problem 1 (10 points)

Suppose we have Restaurants defined as in class:

```
Restaurant = namedtuple('Restaurant', 'name cuisine phone dish price')
```

(a) (5 points) Fill in the body of the function below according to its docstring. [Hint: It can be done in one short line.]

```
def is_cuisine_in_region(R: Restaurant, cuisineList: 'list of str') -> bool:
    """ Return True if the restaurant's cuisine occurs in the second argument
    Example: best_rest = Restaurant("Joe's", "Thai", "33-44-33", "Mee Krob", 15)
            is_cuisine_in_region(best_rest, ['Vietnamese', 'Thai', 'Laotian']) is True
    """
```

(b) (5 points) Fill in the body of the function below according to its docstring. You are not required to use map/filter/reduce or list comprehensions (though you may if you wish). You *are* required to use previously defined functions where appropriate.

```
def keep_regional (RL: 'list', cuisineList: 'list') -> 'list of Restaurant':
    """ Return Restaurants with cuisine from supplied list of cuisines.
        First arg is list of restaurants; second is list of strings (cuisines)
    """
```

Problem 2 (10 points)

Along with this quiz you have a copy of the `AmusementParkSimulation` class definition from the theme park simulator program.

(a) (1 point) What is the name of the attribute (field) that holds the customers who are still waiting to get into the park?

(b) (1 point) There's a line in the code that takes a customer off the list you identified in part (a) when it's time for that customer to enter the park. Copy that line of code here:

(c) (2 points) What happens to a customer whose arrival time at the park is later than the park's closing time?

(d) (2 points) Write a line of code that prints the number of customers who never made it into the park at all, in this form:

```
35 customers never made it into the park.
```

[In the real simulator, the line of code that prints this message would go somewhere in the `SimulationUI` class, but for simplicity here, assume it goes right before the `return` statement in the `run` function.]

(e) (4 points) Write two lines of code that print the names of all the customers who never made it into the park. [These lines could go right after the line you wrote for part (d). The attribute (field) of the `Customer` class that stores the customer's name is just called `name`.]