

## SEVENTH QUIZ

You have 15 minutes from the start of class to complete this quiz. Give partial answers if you can't give complete ones. 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)

Attached is a copy of the original AmusementPark class. Modify the code so that it prints, at the end of its execution, the number of customers who visited the park and the number of rides in the park. Indicate your modifications by writing on the provided copy of the code. Your added output might look like this:

```
Number of customers: 178
Number of rides: 23
```

(You should not need to see or modify any other classes that make up the simulator.)

### Problem 2 (5 points)

Name the programming language that best matches each of these descriptions:

- (a) The first major high-level language for the business data processing community; it had a superficially English-like syntax
  
- (b) Designed as a “high-level assembly language” to provide high-level language advantages for performance-critical tasks that formerly required coding in machine or assembly language
  
- (c) Designed to break the separation between scientific computing and business data processing (by being all things to all programmers)
  
- (d) Based on Algol, it recognized that “small is beautiful” in programming languages by providing the minimal useful set of tools (for its time) so its (mainly) student users could concentrate more on concepts
  
- (e) An object-oriented language, it originated as a language for programming embedded systems but evolved for use over the web

**Problem 3** (5 points)

Below is a list of programming languages we discussed in class. Next to each language, write the name(s) (from the list below) of the person(s) most closely associated with its design and development and write the year (from the list below) that marked the language's debut. But wait! Don't panic! You only have to get five items right for full credit and there's no penalty for wrong guesses.

<u>Language</u>	<u>Person(s)</u>	<u>Year</u>
Fortran	_____	
Cobol	_____	
Algol	_____	
Lisp	_____	
Basic	_____	
PL/I	_____	
Algol 68	_____	
Pascal	_____	
C	_____	
Scheme	_____	
Ada	_____	
Common Lisp	_____	
C++	_____	
Java	_____	
APL	_____	
Prolog	_____	

Names (not all of whom we mentioned in class): John Backus, Alain Colmerauer, Edsger Dijkstra, James Gosling, Grace Hopper, Kenneth Iverson, John Kemeny, Donald Knuth, Thomas Kurtz, John McCarthy, Dennis Ritchie, Guy Steele, Bjarne Stroustrup, Niklaus Wirth

Years: 1954, 1958, 1962, 1964, 1965, 1968, 1971, 1972, 1975, 1983, 1984, 1985, 1992