ICS-365 HW1

\* Due Date – See Class Schedule \*

1. What would be the most likely cause as to the most common syntax error in LISP programs.  
     
   Incorrect number or placement of parentheses.
2. How were the pseudocodes of the early 1950’s implemented?  
     
   They were implemented in machine code.
3. What version of Fortran was the first to have any sort of dynamic variables/  
     
   Fortran 90
4. What are some features of a specific programming language you know whose rationales are a mystery to you?

“Student dependent”

1. What programming language dominated
   1. Scientific computing? Fortran
   2. Business computing? COBOL
   3. Artificial intelligence? Lisp
   4. Operating systems? C
2. What construct of a programming language provides process abstraction?  
     
   Subprograms.
3. What are the 3 fundamental features of object-oriented programming? What language was the first to support them?  
     
   1- Encapsulation: it’s used to hide certain information to protect it from being altered  
     
   2- Inheritance: it allows the reuse of existing code.  
     
   3- Polymorphism: it allows functions and datatypes to belong to generic classes.  
     
   First language to support them is: Smalltalk.
4. Why, in your opinion, do scripting languages appear more frequently than new compiled langagues?  
     
   “Student dependent”
5. What other logic programming languages exist beyond prolog?  
     
   - Mercury  
   - ALF

- ASP  
- Alma-0  
- CLACL  
- Curry  
- Fril  
- Janus  
- Oz  
- ROOP

1. Describe in your own words the concept of orthogonality in programming language design?   
     
   “Student dependent”