1. Language Evaluation Criteria
   1. How to judge a program?
      1. Readability
         1. Easy to read and understand
      2. Writability
         1. Ways to reduce repetitive redundant characters
      3. Reliability
         1. Provides less instances of failure
            1. Java allowing io exception handlers

EX: array out of bound exceptions checked at run time then an io exception can be thrown

* + 1. Cost
       1. To learn
       2. To develop
       3. To compile
       4. Etc…
    2. Possible for these criteria to cause conflicts one cause readability to go down
  1. APL language
     1. Many operators allow high writability but reduces readability
  2. Construct
     1. **AIM FOR: Orthogonality**
        1. A relatively small set of primitive constructs can be combined in a relatively small number of ways

1. Compiler
   1. Lexical analyzer
      1. Tried to recognize Creates a sequence of tokens
   2. Syntax Analyzer
      1. Checks the sequence of tokens is valid
   3. Work in conjunction to create a token then read tokens that then output code
   4. Code generation
      1. Assembly code
      2. Intermediate code
         1. C#’s pseudo machine code is .NET
         2. Java pseudo machine code or byte code is JavaVM code or .class files
      3. Object code
         1. Obj code is fed into linker loader then outputs an executable
   5. JIT compiler just-in-time
   6. JIT interpreter is shell