Finding Student Grade (Flow chart)

- Read ID #
- Read Score
- All scores Read?
  - NO
  - YES
  - Calculate Total Points
  - Give Letter Grade
- All Students done?
  - NO
  - YES
  - End

Language Levels

- High level Language
  - Ada, C, C++, Fortran, Java, Pascal
- Assembly Language
  - LDA, ADD, STO like commands
- Machine Language
  - Binary 001101
  - 001110
- Hard ware

Modular Structure Chart (To Find Students’ Letter Grade)

1. GetScores
2. CalculateTotal
3. AssignLetterGrades
4. OutputResults

- GetScores()
- CalculateTotal()
- OutputResults()
- AssignLetterGrades()

- Procedural Abstraction
- Information Hiding

Pseudocode Design Example

```
PRINT "Enter the possible perfect number"
READ p

Comment initialize sum of the divisors & divisor
DivSum = 1
Divisor = 2

Comment find all possible divisors
While Divisor <= p / 2 Do
  R = p - (Truncate (p / Divisor)) * Divisor
  IF R = 0 THEN
    DivSum = DivSum + Divisor
    EndIf
  Divisor = Divisor + 1
EndWhile

If DivSum = p Then
  PRINT p " is a perfect number"
Else
  PRINT p " is NOT a perfect number"
EndIf
```