Pseudocode Examples

**An algorithm is a procedure for solving a problem in terms of the actions to be executed and the order in which those actions are to be executed. An algorithm is merely the sequence of steps taken to solve a problem. The steps are normally "sequence", "selection", "iteration" and a case-type statement.**

**Remember "sequence statements" are imperatives, the "selection" is the "if then else" statement, and the iteration is satisfied by a number of statements, such as the "while," " do," and the "for," while the case-type statement is satisfied by the "switch" statement.**

**Pseudocode is an artificial and informal language that helps programmers develop algorithms. Pseudocode is a "text-based" detail (algorithmic) design tool.**

**The rules of Pseudocode are reasonably straightforward. All statements showing "dependency" are to be indented. These include while, do, for, if, switch.**

Examples:

1.

If student's grade is greater than or equal to 60

Print "passed"

else

Print "failed"

2.

Set total to zero

Set grade counter to one

While grade counter is less than or equal to ten

Input the next grade

Add the grade into the total

Set the class average to the total divided by ten

Print the class average.

3.

Initialize total to zero

Initialize counter to zero

Input the first grade

while the user has not as yet entered the sentinel

add this grade into the running total

add one to the grade counter

input the next grade (possibly the sentinel)

if the counter is not equal to zero

set the average to the total divided by the counter

print the average

else

print 'no grades were entered'

4.

initialise passes to zero

initialise failures to zero

initialise student to one

while student counter is less than or equal to ten

input the next exam result

if the student passed

add one to passes

else

add one to failures

add one to student counter

print the number of passes

print the number of failures

if eight or more students passed

print "raise tuition"

**Some Keywords That Should be Used**

For looping and selection the keywords that are to be used include:

Do While...EndDo, Do Until...Enddo, Case...EndCase, If...Endif, Call ... with (parameters), Call…… Return.

As verbs, use the words Generate, Compute, Process, etc. Words such as set, reset, increment, compute, calculate, add, sum, multiply, ... print, display, input, output, edit, test , etc. with careful indentation tend to foster desirable pseudocode.

Do not include data declarations in your pseudocode.