

Lab Homework 3 – Due 03/12/2009

Name: _____

Section: 8:00 11:00 12:30 6:30

Designing Loops

Below are some loops, using either `for`, `while`, or `do while`. You are tasked to rewrite the loop using a different loop structure (`for` if originally a `while`, and vice-versa). Be sure that the variables will have the same value after the loop completes.

<pre>while (diff > 0.001) { oldval = newval; newval = 0.25 * oldval + 4.0 / oldval; diff = fabs(oldval - newval); }</pre>	(Use a for loop)
<pre>for (i = 0; i < size; i++) { if (0 == (i % 3)) { sum += i; } }</pre>	(Use a while loop)
<pre>do { fun = 0; for (i = 0; i < people; i++) { fun += i; } people = 100 * people / fun; } while (fun > the_roof);</pre>	(Use a while loop nested inside a for loop)
<pre>n = 1; m = 512; while (n < m) { n = n + 1; m = m / 2; }</pre>	(Use a for loop)