Homework 5
posted Mar. 9, due Mar. 22 at the beginning of the class
(no late turn-ins will be accepted).
Please put a cover page over the homework. The grade
will be written on the second page.

1. (20 pts) Exercise 7.2

2. (20 pts) Short-circuit evaluation of boolean expressions

When an IF condition or a While loop condition is a Boolean expression, e.g.
a && b, often the truth value of that expression can be determined without
evaluating all components of the expression. For example, if a is false, then
we know a && b must be false without even knowing the truth value of b.
The branch operation can take place as soon as the branch condition can be
determined. This is called short-circuit evaluation of Boolean expression.

Please convert the following While loop into intermediate code using the idea
of short-circuit boolean evaluation.

while ( (a < d) || (e < f) )  t = t + 1;

Introduce labels and temporaries as needed.