The code at
http://www.soe.ucsc.edu/classes/cmps203/Fall04/hw6.ml
implements a type checker and evaluator for the simply-typed
lambda-calculus.

1. In the cases where it is possible, give a program that:
   A. type checks and does not “core dump” on execution
   B. does not type check and does not “core dump”
   C. type checks and “core dumps”
   D. does not type check and “core dumps”

Use the above implementation to test your programs and include a
printout of your test runs.

2. Extend the above implementation to include booleans, with the
two boolean values and the operation “not”. Type check and run
some sample programs that use booleans. Include a printout of
your code and test runs.