

Assignment 4

Typechecking BC#

Due: 11:59pm, Wednesday, October 10

E-mailed questions about this assignment should be sent to cs132help@cs.hmc.edu.

1. Make a `svn copy` of your `a3` directory (or your partner's directory, if you have a new partner) to make `a4`.
2. `svn copy` in the files in `src/a4`. The new files include
 - `typeutil.sml` and `typeutil.sig`, containing a whole bunch of helper code related to types and type checking.
 - `typecheck.sml`, containing about half of a BC# type checker. It actually makes three passes over the abstract syntax: first to gather class names, then to gather fields and methods, and only then does it look at the expressions and statements in the code.
3. There are some small fixes to the abstract syntax (`write` is now a statement, and constructors remember their names). Update your parser so that everything compiles.
4. Scan the contents of `typeutil.sig` and `typecheck.sml`.
5. Complete the code to type check expressions and statements in `typecheck.sml`. (Look for `Unimplemented`).
6. Next week, we'll revise this code so that the type checking functions will return a lower-level translation of the input, in addition to checking well-formedness.