CS 565, Jens Palsberg   Mar 2, 2000

Homework 4: Scheme Type Inference

A grammar for BabyScheme in JavaCC notation is on the CS 565 webpage in the code directory. Consider a type system where types are generated from the grammar:

$$t ::= t \to t \mid \mathsf{int} \mid \mathsf{boolean} \mid \alpha$$

where α ranges over a set of type variables.

Use JTB/GJ and JavaCC and write in Java one or more visitors which from a BabyScheme program produces the principal type, or decides that no type exists.

Your main file should be called `Infer.java`, and if `P.scm` contains a BabyScheme program, then

```
java Infer < P.scm
```

should print either the principal type, or

```
Program does not type check
```