## Elaborating Type Providers

To elaborate

```
%provide (x : T) with p
```

- 1. Elaborate goal type T to  $\tau$ . Check that  $\tau$ : Type.
- 2. Elaborate p to  $\pi$ . Check that  $\pi$  : IO (Provider  $\tau$ ).
- 3. Execute  $\pi$ :
  - ▶ If Provide y, then result is  $x : \tau$ ; x = y.
  - ▶ If Error *err*, then show user *err*.
  - ▶ If something else, then show user a generic error.