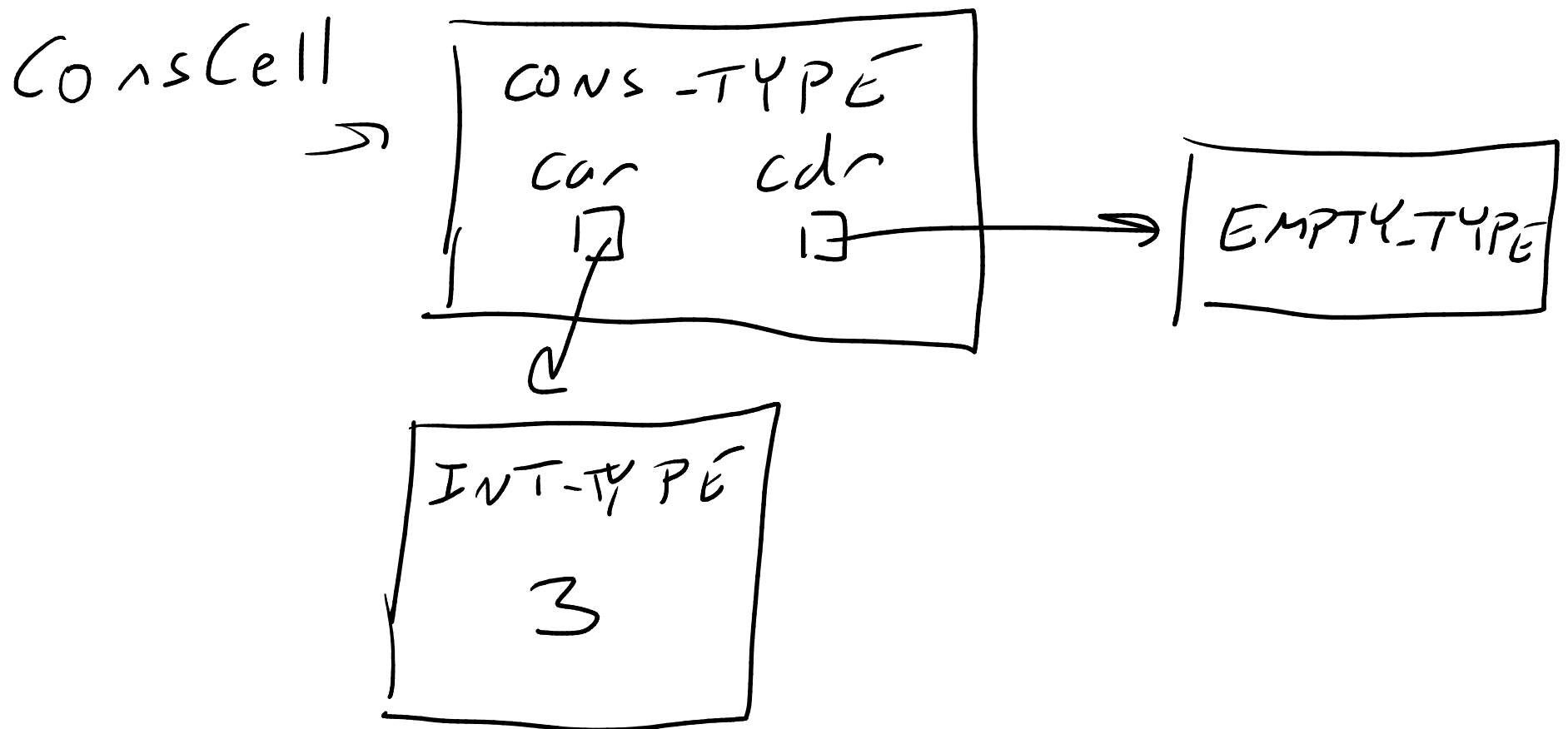
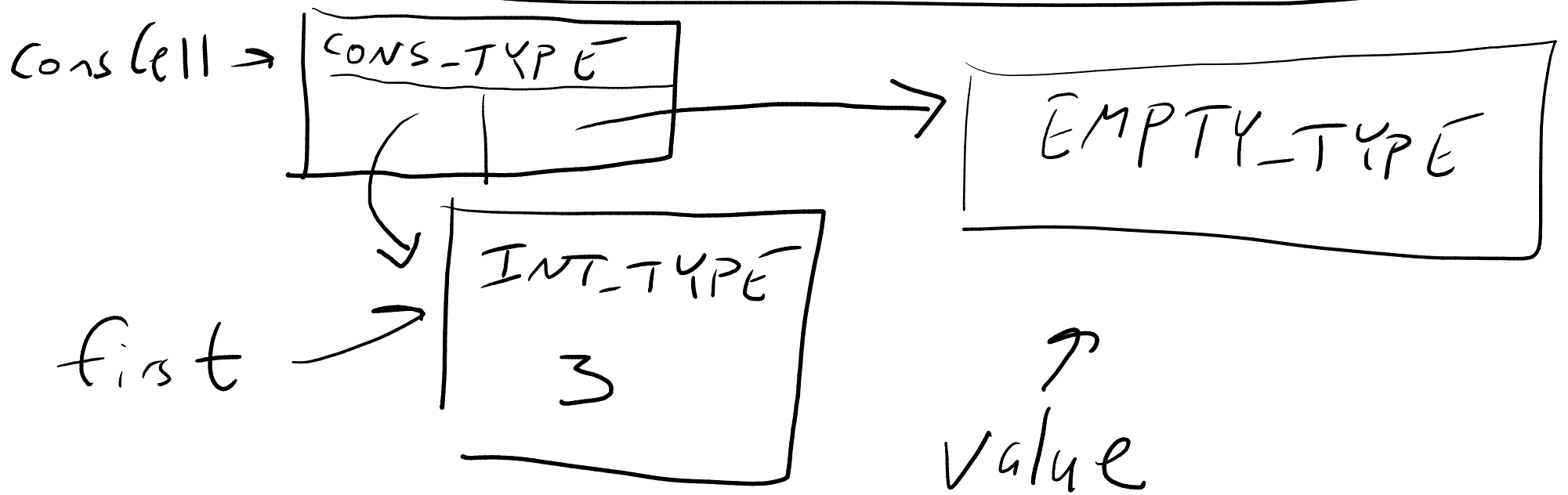


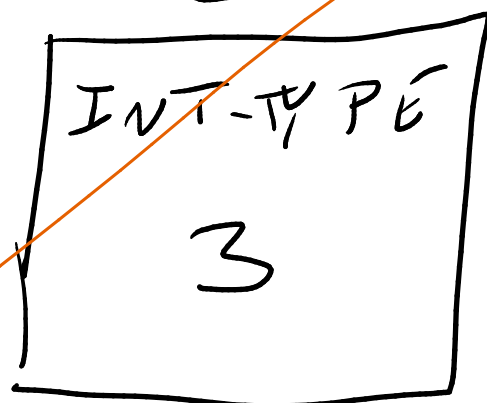
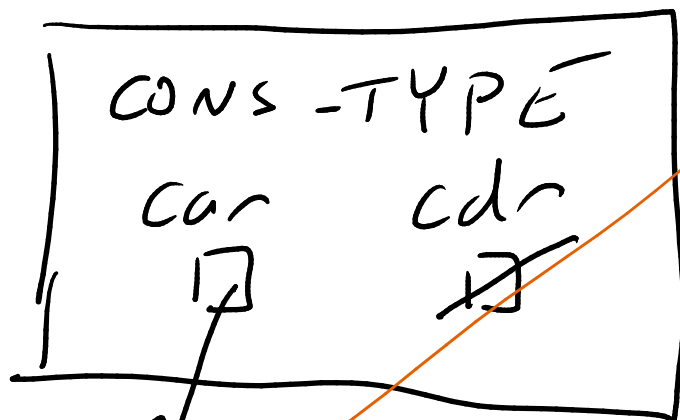
Unions
linked list / details

Ground rules for
code
issues



What we are not doing is using built in
C null for the ends of lists
i.e.

ConsCell



One of the functions:

```
void display (SchemeVal *list) {  
    // code
```

... until EMPTY_TYPE ...

If list is an actual C NULL,
that's a bug. It should
never happen, unless your
other functions constructed
the list incorrectly.

```
if (list == NULL) {  
    printf("omg internal bug")  
}
```

a better approach:

```
assert(list != NULL)
```

↑ if condition is not true,
stop w/ a line number

— designed for identifying
internal bugs

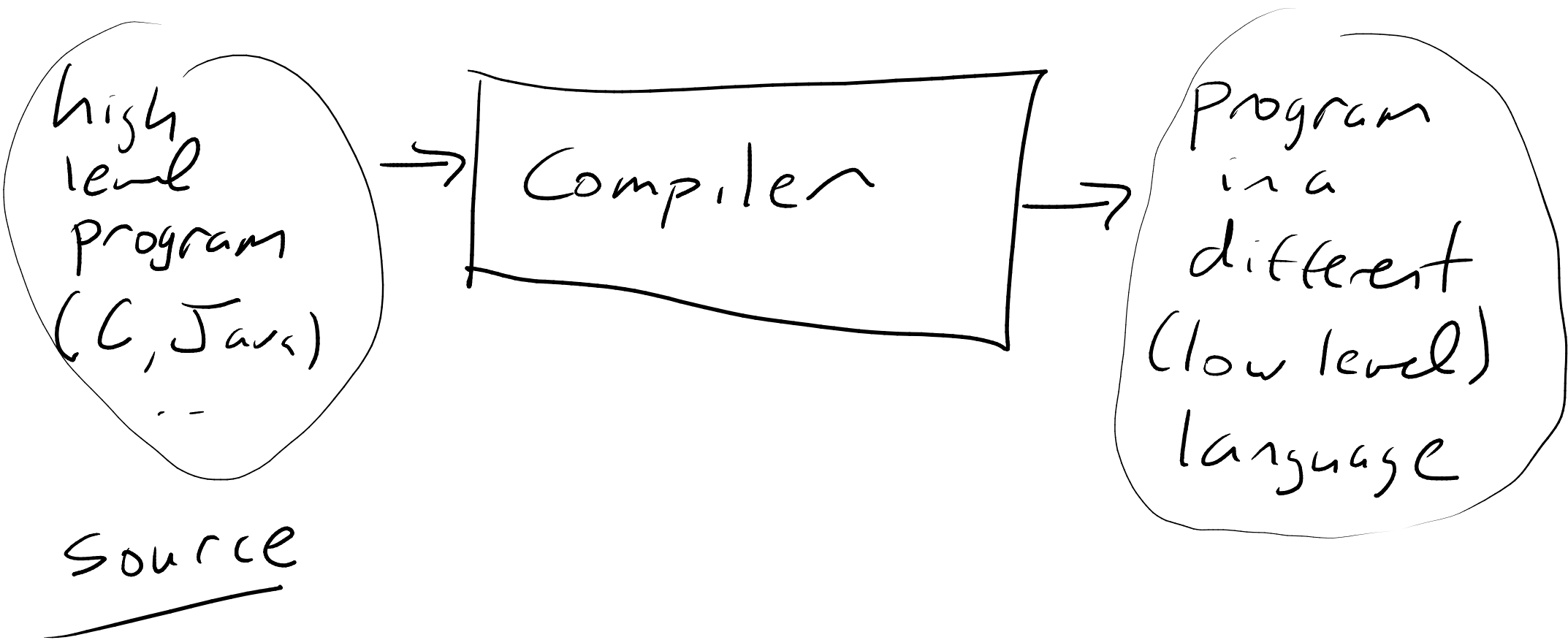
```
#include <assert.h>
```

Compilers vs interpreters

Computers only understand "machine language"

We need tools to allow us to use higher level languages

Compiler is just a translator



Interpreter is a program that directly executes the source program

- interpreter "pretends" to understand the source program