Datatypes and Trees

1 Exceptions

In OCaml, *run-time errors* are reported with *exceptions*. An exception can be defined for later use, with the syntax: **exception** *name*. The exception can also accept arguments of some specified type, using the syntax: **exception** *name* **of** *type*. Such an exception is called with (*name argument*). Raise an exception with the keyword **raise**. See examples in the functions "take" and "drop", defined in the lists chapter.

It is also possible to *handle* an exception with an *exception handler*. Note that the types must be consistent with the type of the function.

```
safe_divide : int -> int -> int

let safe_divide x y =
  try x / y with
    Division_by_zero -> 0
```