

What is naming?

Most languages provide a way to **name** and **reuse** stuff

Naming concepts

declaration

introduce a new name

binding

associate a name with a thing

reference

use the name to stand for the bound thing

C/Java variables

```
int x; int y;
```

```
x = slow(42);
```

```
y = x + x + x;
```

In Haskell:

Local variables

```
let x = slow 42  
in x + x + x
```

Type names

```
type Radius = Float  
data Shape = Circle Radius
```

Function parameters

```
area r = pi * r * r
```