

An object

declare

local

A1={NewCell I1}

...

An={NewCell In}

in

proc {M1 ...} ... **end**

...

proc {Mm ...} ... **end**

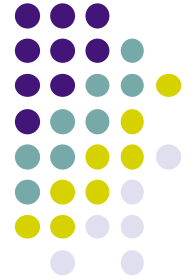
end

This code gives the structure of an object abstraction.

An object is a combination of local cells A1, ..., An and global procedures M1, ..., Mm.

We call A1, ..., An the “**attributes**” and M1, ..., Mm the “**methods**”.

Attributes A1, ..., An are *hidden* from the outside and methods M1, ..., Mm are *visible* from the outside (interface!).



A counter object

declare

local

A1={NewCell 0}

in

proc {Inc} A1:=@A1+1 **end**

proc {Get X} X=@A1 **end**

end

{Inc}

local X **in** {Get X} {Browse X} **end**

This code creates one object that implements a counter.

The object has two methods, Inc and Get, and is initialized to 0.

Since the cell can only be accessed by the methods, the behavior is **guaranteed correct**: {Get X} binds X to an integer that gives the number of calls {Inc} done before.