
PARALLEL CODE: f90

Free format code

None of the old 5th/6th column indenting stuff! Yahoo!

Array syntax

```
REAL :: a(nx,ny,nz), b(nx,ny-9,nz)
a(:,10:,10:20) = b
```

Derived data types

Specify your own types of data

```
Type adams_bashforth
  Complex(Double) :: force(:,,:), force2(:,,:), current(:,,:), rhs(:,,:)
  Real(Double)    :: coordinate(:,,:,:)
End Type adams_bashforth
```

```
Type(adams_bashforth) :: temperature
```

In the main program:

```
temperature%coorindate(:, :, 1) = 1
```

Modules

New type of program unit

Shares data and procedures between program units

e.g.

```
MODULE point_module

  TYPE point
    REAL :: x,y
  END TYPE point

CONTAINS

  FUNCTION addpoints(p,q)
    TYPE (point), INTENT(IN) :: p,q
    TYPE (point) :: addpoints
    addpoints%x = p%x + q%x
    addpoints%y = p%y + q%y
  END FUNCTION addpoints

END MODULE point_module
```

The main program would contain:

```
USE point_module
TYPE (point) :: px, py, pz
...
pz = addpoints(px,py)
```