```
!------------------------------------------------------------------------------
! Variables
!------------------------------------------------------------------------------

! Scalars
integer :: n
integer(kind=selected_int_kind(10)) :: large_integer

real :: pi, diameter
character(len=30) :: text

pi = 3.141592

! Arrays
real, dimension(3) :: point
integer, dimension(4,4) :: matrix

point(1) = 1.23456
point = (/ 1.23, 4.56, 7.89 /)
matrix(1,2) = 4

!------------------------------------------------------------------------------
! Conditionals
!------------------------------------------------------------------------------

if( diameter < 0 ) then
    ! ...
else if( diameter == 0 ) then
    ! ...
else
    ! ...
end if

select case( n )
    case( 1 )
        ! ...
    case( 2:3 )
        ! ...
    case default
        ! ...
end select

!------------------------------------------------------------------------------
! Program units
!------------------------------------------------------------------------------

! Main program
program my_prog
    use my_mod
    implicit none
    ! ...
contains
    subroutine my_sub( arg, gra )
        integer, intent(in out) :: arg
        real, intent(out) :: gra
        ! ...
    end subroutine my_sub
end program my_prog

! Module
module my_mod
    implicit none
    integer, parameter :: bar
contains
    function my_fun( arg ) result( foo )
        real, intent(in) :: arg
        integer :: foo
        ! ...
    end function my_fun
end module my_mod

!------------------------------------------------------------------------------
! Input/output
!------------------------------------------------------------------------------

read *, diameter
read(unit=*,fmt=*) diameter

print *, "Diameter = ", diameter
write(unit=*,fmt=*) "pi = ", pi

```