

May 19, 17 15:40

sortnr.f90

Page 1/1

```

!234567890
subroutine sortnr(n,arrin,indx)
!  sorts an array by the heapsort method
!  w. h. preuss et al. numerical recipes
implicit real*8 (a-h,o-z)
dimension arrin(n),indx(n)
do 11 j=1,n
    indx(j)=j
11 continue
l=n/2+1
ir=n
10 continue
    if(l.gt.1)then
        l=l-1
        indxt=indx(l)
        q=arrin(indxt)
    else
        indxt=indx(ir)
        q=arrin(indxt)
        indx(ir)=indx(l)
        ir=ir-1
        if(ir.eq.1)then
            indx(l)=indxt
            return
        endif
    endif
    i=l
    j=l+1
20    if(j.le.ir)then
        if(j.lt.ir)then
            if(arrin(indx(j)).lt.arrin(indx(j+1)))j=j+1
        endif
        if(q.lt.arrin(indx(j)))then
            indx(i)=indx(j)
            i=j
            j=j+j
        else
            j=ir+1
        endif
        go to 20
    endif
    indx(i)=indxt
go to 10
end

```