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PROGRAM dyzdx
*****
* First derivate an x-ordered x-y-z file. From standard input it reads *
* input file (3 column, ordered with increasing value of x)           *
* The resulting x y z file flushed to standard output.                 *
*****
parameter(nphys=100000)
real xx(nphys),yy(nphys),zz(nphys),dx,x,y,z
INTEGER I,mm

mm=100000
do 10 i=1,mm
  READ(*,*,END=11) xx(i),yy(i),zz(i)
10  continue
11  mm=i-1

do 20 i=1,mm-1
  x=(xx(i)+xx(i+1))/2
  dx=(xx(i+1)-xx(i))
  y=(yy(i+1)-yy(i))/dx
  z=(zz(i+1)-zz(i))/dx
  write(*,*) x,y,z
20  continue
end

```