

ADAS Subroutine xxi4ss

```
subroutine xxi4ss(n, lup, ia, itag)
```

```
C-----  
C  
C ***** FORTRAN77 SUBROUTINE: XXI4SS *****  
C  
C PURPOSE: Sorts an integer array xa and its index array. This is a  
C           bubble sort designed for small arrays.  
C  
C  
C CALLING PROGRAM:  General use  
C  
C  
C SUBROUTINE:  
C  
C INPUT          : (I*4) N      = Size of input arrays  
C INPUT          : (L*4) LUP    = .TRUE. sort in ascending order  
C                               .FALSE. descending order  
C INPUT/OUPUT    : (I*4) IA     = Array to be sorted  
C INPUT/OUPUT    : (I*4) ITAG   = Original index of sorted XA  
C  
C ROUTINES       : NONE  
C  
C NOTES          : Shell sort from Numerical Receipies.  
C  
C AUTHOR         : Martin O'Mullane  
C  
C DATE           : 7-02-2000  
C  
C VERSION        : 1.1  
C  
C-----
```

```
INTEGER          IA(*),      ITAG(*),      N  
LOGICAL          LUP
```