```
   Help
#if defined(PremiaCurrentVersion) && PremiaCurrentVersion <
     (2008+2) //The "#else" part of the code will be freely av
    ailable after the (year of creation of this file + 2)
#else

void matmat(double **a, int nra, int nca, double **b, int
    ncb, double **prod);
/*-----------------------------------------------------------
    ----------
 Postmultiplies the matrix a[0..nra-1][0..nca-1] by the
    matrix
 b[0..nca-1][0..ncb-1] and returns the product in the matr
    ix
 prod[0..nra-1][0..ncb-1].
-----------------------------------------------------------
    --------*/

void matvec(double **a, int nra, int nca, double *x,
    double *b);
/*-----------------------------------------------------------
    ----------
 Postmultiplies the matrix a[0..nra-1][0..nca-1] by the vec
    tor
 x[0..nca-1] and returns the product in the vector b[0..nra
    -1].
-----------------------------------------------------------
    --------*/

void transpose(double **a, int nr, int nc, double **at);
/*-----------------------------------------------------------
    ----------
 Returns the transpose of a[0..nr-1][0..nc-1] as
 at[0..nc-1][0..nr-1].
-----------------------------------------------------------
    --------*/

void vecmat(double *x, double **a, int nra, int nca,
    double *b);
/*-----------------------------------------------------------
    ----------
```

```
 Premultiplies the matrix a[0..nra-1][0..nca-1] by the vec
    tor
 x[0..nra-1] and returns the product in the vector b[0..nc
    a-1].
-------------------------------------------------------------
    --------*/

double vecvec(double *first1, double* last1, double* first2
    );
/*-------------------------------------------------------------
    ----------
 Returns the inner product between the vectors u[0..n-1] and
 v[0..n-1].
-------------------------------------------------------------
    --------*/

//void pairwdiff(double* first1, double* last1, double* fir
    st2, double* last2, double* dest);
void pairwdiff(int n, double* x, double* y,   double **de
    st);

/*-------------------------------------------------------------
    ----------
 Computes the pairwise differences between the elements in
 [first1, last1) and the elements in [first2, last2) and pl
    aces them
 in dest.  dest must be large enough to hold all of the m *
     n
 differences, where m = last1 - first1 and n = last2 - fir
    st2.
-------------------------------------------------------------
    --------*/

#endif //PremiaCurrentVersion
```

References