Exercise 2: solution

Initialization

```
if( me == 0 ){                    | if( me == 1 ){                     | if( me == 2 ){
  matrix A,B,C,X;                 |   matrix A,B,C,Y;                  |   matrix fA,C,Z;
  request reqS1, reqS2, reqR1, reqR2; |   request reqS0, reqR0, reqR2;  |   request reqS0, reqS1, reqR0;
  int req;                        |   int req;                         | }
}                                 | }                                  |
```

Body

```
if( me == 0 ){                    | if( me == 1 ){                     | if( me == 2 ){
  Isend( A, 1, reqS1 );           |   Isend( B, 0, reqS0 );            |   Isend( C, 0,  reqS0 );
  Irecv( B, 1, reqR1 );           |   Irecv( A, 0, reqR0 );            |   Isend( C, 1,  reqS1 );
  Irecv( C, 2, reqR2 );           |   Irecv( C, 2, reqR2 );            |   Irecv( fA, 0, reqR0 );
                                  |                                    |
  X = A;                          |   Y = g( B );                      |   Z = g( C );
  f( X );  // X = f(A);           |                                    |
  Isend( X, 2, reqS2 );           |   for( req=0; req<2; req++ ){       |   Wait( reqR0 )
                                  |      WaitAny(reqR0, reqR2);         |   Z = Z + fA;
  Wait( reqS1 );                  |      if( reqR0 ) Y = Y + A;         |
  A = 0;                          |      if( reqR2 ) Y = Y - C;         |   //Wait( reqS0 );
                                  |   }                                |   //Wait( reqS1 );
  for( req=0; req<2; req++ ){     |                                    | }
     WaitAny(reqR1, reqR2);       |   // Wait( reqS0 );                |
     if( reqR1 ) A = A + B;       | }                                  |
     if( reqR2 ) A = A + C;       |                                    |
  }                               |                                    |
                                  |                                    |
  Wait( reqS2 );                  |                                    |
  X = X + A;                      |                                    |
}                                 |                                    |
```