

```

for(j = 0; j < n; j+=nb){
    jb = (( nb < n-j ) ? ( nb ) : ( n-j ));
//    load A[ j:j+jb-1 ][ j:j+jb-1 ] to cache ( note: lower triangular part only )
    for(i = 0; i < j; i++){
//        load A[ j:j+jb-1 ][ i ] to cache
        for ( jj = j ; jj < j+jb ; jj++ ){
            for ( ii = jj ; ii < j+jb ; ii++ ){
                A[ ii ][ jj ] -= A[ ii ][ i ]*A[ jj ][ i ];
            }
        }
//        remove A[ j:j+jb-1 ][ i ] from cache ( note: erase, do not write back )
    }

//    ( note: leave A[ j:j+jb-1 ][ j:j+jb-1 ] in cache )
    for ( ii = j ; ii < j+jb ; ii++ ){
        for ( jj = j ; jj < ii ; jj++ ){
            A[ ii ][ ii ] -= A[ ii ][ jj ] * A[ ii ][ jj ];
        }
        for ( jj = j ; jj < ii ; jj++ ){
            for ( kk = ii+1 ; kk < j+jb ; kk++ ){
                A[ kk ][ ii ] -= A[ kk ][ jj ] * A[ ii ][ jj ];
            }
        }
        A[ ii ][ ii ] = SQRT_FUN(A[ ii ][ ii ]);
        for ( jj = ii+1 ; jj < j+jb ; jj++ ){
            A[ jj ][ ii ] /= A[ ii ][ ii ];
        }
    }

//    write A[ j:j+jb-1 ][ j:j+jb-1 ] back from cache ( note: lower triangular part only )
    for(i = j+jb; i < n; i+=jb){
        ib = (( jb < n-i ) ? ( jb ) : ( n-i ));
//        load A[ i:i+ib-1 ][ j:j+jb-1 ] to cache
        for(k = 0; k < j; k++){
//            load A[ i:i+ib-1 ][ k ] and A[ j:j+jb-1 ][ k ] to cache
            for(jj = j; jj < j+jb; jj++){
                for(ii = i; ii < i+ib; ii++){
                    A[ ii ][ jj ] -= A[ ii ][ k ] * A[ jj ][ k ];
                }
            }
//            remove A[ i:i+ib-1 ][ k ] and A[ j:j+jb-1 ][ k ] from cache
//            ( note: erase, do not write back )
        }

//        write A[ i:i+ib-1 ][ j:j+jb-1 ] back from cache
    }

//    load A[ j:j+jb-1 ][ j:j+jb-1 ] in cache ( note: lower triangular part only )
    for(i = j+jb; i < n; i++){
//        load A[ i ][ j:j+jb-1 ] to cache
        for(ii = j; ii < j+jb; ii++){
            for(jj = j; jj < ii; jj++){
                A[ i ][ ii ] -= A[ ii ][ jj ] * A[ i ][ jj ];
            }
            A[ i ][ ii ] /= A[ ii ][ ii ];
        }

//        write A[ i ][ j:j+jb-1 ] back from cache
    }

//    remove A[ j:j+jb-1 ][ j:j+jb-1 ] from cache ( note: erase, do not write back )
}

```