

SOFT 1.0 bug: Too long for-loops

A user recently brought to our attention errors in two of the example files provided in the *SOFT* 1.0 distribution: `test_soft_sym_correlate2.c` and `test_soft_fftw_correlate2.c`. The errors deal with that portion of the code responsible for reading in the data containing the signal and pattern samples (prior to transforming). The for-loops are twice as long as they need be. We apologize for any problems this may have caused. Unfortunately, the errors did not reveal themselves during our tests. But fortunately, the fix is easy.

In `test_soft_sym_correlate2.c`, beginning at line 151, we have the following block of code:

```
printf("Reading in signal file\n");
/* read in SIGNAL samples */
/* first the signal */
fp = fopen(argv[1],"r");
for ( i = 0 ; i < 2*n * n ; i ++ )
{
    fscanf(fp,"%lf", sigR + i);
    fscanf(fp,"%lf", sigI + i);
}
fclose( fp );
```

The inequality in the `for` statement is incorrect. The iterator `i` should not go so high. The line should instead read

```
for ( i = 0 ; i < n * n ; i ++ )
```

The same correction should be made in the `for` statement on line 172 (when reading in the pattern file).

The corrections to make in `test_soft_fftw_correlate2.c` are identical. The `for` statements on lines 193 and 210 need to be corrected as above.