The software you used for the first numerical lab came from many different sources. Some of it was written specifically for this lab, but the vast majority of it comes from other sources, all of which make their packages freely available over the web.

Downloading the Software

To recreate the environment for the first numerical lab, you need to download the following packages:
LAPACK : http://www.netlib.org/lapack/
ISIS++ : http://z.ca.sandia.gov/isis/
SPARSKIT2 : http://www.cs.umn.edu/Research/arpa/SPARSKIT/sparskit.html

You may find the file 'matpde.f' at the following URL. Download it and use it as described in "Installing the Software".
MATPDE : http://math.nist.gov/MatrixMarket/data/NEP/matpde/matpde.html

The necessary part of the Harwell-Boeing I/O routines are included with the lab distribution. Should you desire the full package, refer to the following URL:
HBIO1.0 : http://math.nist.gov/~KRemington/harwell_io/harwell_io.html

Installing the Software

LAPACK should be installed first. Install ISIS++ second. Install SPARSKIT2 third.

If you need help installing any of these packages, please contact your system administrator.

After installing the above three packages, untar the archive associated with this file. This will create a directory structure with 'isis_work' as the root. Now do the following:
1) Place the matpde.f file (from the MatrixMarket URL above) in the isis_work directory.
2) Place the libskit.a library generated from building SPARSKIT2 in this directory.
3) cd to /isis_work/iohb1.0 and do a 'make all'.
4) Copy the resulting executables back to /isis_work.
5) Copy the file 'make.options' from your ISIS install directory to /isis_work.
6) cd to /isis_work and do a 'make all'.

Congratulations! You have now recreated the environment used in the first numerical lab. See the "lab_handout" file attached to this distribution for a copy of the handout you received in the lab.