MATH 1070. Intro. Computational Science

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<u>Outline</u>   Lecture n+1 (Monday 22 August 2005)

• I/O: load and save
For ascii files:
```
a=[12 23 5; 2 -4 4];
save mydata.txt a –ascii

% to load the data
a=load('mydata.txt')
```

NB: if you type load mydata.txt, MATLAB saves the data into a variable called mydata.

For binary files:
```
a=[12 23 5; 2 -4 4];
save filename a
```
Saves variable a in the file *filename.dat* (MATLAB proprietary format).
```
% to load the data
load filename
```

• I/O: the Import Wizard
Accessible from **Import Data** in the **File** menu.
> Open the data file
> Select the delimiter (space, ',', ';' …) if necessary; click **Next**
> Select the variable you want to import
> Click **Finish**

• Visualisation in MATLAB
1D: plot, plotyy, semilogy, loglog, polar, fplot, etc
2D: meshgrid, mesh, surf, etc
3D: see MATH4205 or COMP3000

• References
Edward Tufte
The visual display of quantitative Information, Graphics Press

Howard Wainer
Visual revelations, Copernicus - Springer Verlag