18.085 Computational Science and Engineering I Fall 2008

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## 18.085: Matlab homework 1

Find the displacements x(1), ..., x(100) of 100 masses connected by springs. Consider the following cases:

- $c_i = 1$  and  $f_i = 0.1$  for all i. The end of spring 101 is fixed (as in figure 1.7).
- $c_i = 1$  and  $f_i = 0.1$  for all i. The end of spring 101 is hanging free.
- $c_i = 1$  and  $f_i = i * 0.1$ . The end of spring 101 is fixed.
- $c_i = i$  and  $f_i = 0.1$ . The end of spring 101 is fixed.

Submit GRAPHS of the displacements in these cases.