KNOWLEDGE PROBE 3: DATA ACQUISITION SYSTEMS
Data Acquisition Software

Learning Objectives
1. Identify the main categories of software.
2. Describe different types of languages used to develop data acquisition systems.
3. Describe different software used in data acquisition systems.

1. Which type of software controls the ADC, MUX, and input hardware?
   a. Control software
   b. Data analysis software
   c. Display software
   d. Process monitoring software

2. Which language in NOT commonly used to create custom software for a DAQ?
   a. Assembler
   b. C or C++
   c. Pascal
   d. Visual BASIC

3. Most DAQ hardware is supplemented with applicable software.
   a. True
   b. False

4. For most DAQ applications, special custom software must be written.
   a. True
   b. False

5. The most widely used DAQ software is
   a. Apple Tiger
   b. LabVIEW
   c. Linux with C
   d. Microsoft Windows

6. What company makes LabVIEW?
   a. HP
   b. Microsoft
   c. National Instruments
   d. Sun

7. Which best describes the process of programming with LabVIEW?
   a. An artificial intelligence program selects code based on your needs
   b. Code is written using processor mnemonics
   c. Program is assembled by linking available subroutines
   d. Program is defined by connecting block icons on the screen

8. A computer programmed with LabVIEW or a similar program to simulate a piece of test equipment is called a(n)
   a. Computer simulation
   b. Emulator box
   c. Fake instrumentation
   d. Virtual instrument

9. In developing a virtual instrument, the first step is to construct a
   a. Block diagram
   b. Display output
   c. Front panel
   d. Process module

10. A VI may contain the following:
    a. Spectrum analysis
    b. Statistical analysis
    c. Time plot display
    d. Any of the above