24 Sound Programming with sound card

"Patience is better than strength."

To have digitized sound, people install sound cards. Sound cards are necessary for music software. Yet, sound cards don't have any standard. Each manufacturing company produces sound cards with its own standard. So programming for sound card won't be unique. And we must know the standards used by each and every manufacturer. If I start explaining all the sound cards, it will really be boring. So I left the reader to program for his own sound card as an exercise. Few example codes are available in CD. Hope that might be useful to you.

24.1 Idea

Normally, sound cards are accompanied with manuals. In that manual, you can find the standards used by that particular sound card. The basic idea is that you have to load frequency value to the register of the sound card. These registers are normally accessed via I/O ports. I/O ports' details are available on Ralf Brown's Interrupt List.

Suggested Projects

1. Write software that plays WAV, MIDI files through sound card.
2. I have already explained multiple keys input concept. Yet I haven't come across a Piano software that can work with multiple keys and sound card. If you can write such a software, it will be the world's first one! (Hint: Use Ctrl or Alt key for "sustain")