Topics: Even More tty control: Programming for Humans

Approach: Use User Programs, Write a User Program

Main Questions:

       How Can I Control the User Input Stream?

       What Does the tty Driver Do?

       What does Ctrl-C do?

Outline

       The Big Picture again
              Today: Getting data from keyboards

       Software tools vs. User Programs
              Software tools are attached to abstract data streams
              User Programs are attached to keyboards

       Special Concerns of User Programs
              Immediate response to chars
              Limited input set
              Timeout on input
              Resistent to Ctrl-C

       Exploring the tty Driver

       Concrete Example: ATM security
              play_again0: minimal operation
              play_again1: one-char input
              play_again2: one-char input, no echo, ignore other input
              play_again3: crmode, noecho, nonblocking

       Signals
              How they work
              What they are
              Where they come from
              What they can do
              Setting a response

       Back to play_again
              play_again4: catches signals and cleans up