**Thread Management:**

main

print\_wave

read\_command

aread\_waveform\_config

SIGINT

“-a”

“-d”

There are 4 threads in total in this program:

1. main
   * sets up the PCI
   * initializes all the other threads
   * catches SIGINT to initiate exit sequence
2. read\_command
   * reads all keyboard inputs from user
   * controls condition to block/wake aread\_waveform\_config
   * builds waveform array in digital mode
3. print\_wave
   * continuously outputs to DAC based on waveform array
4. aread\_waveform\_config
   * reads input from ports and ADC
   * build waveform array in analog mode