Question 3.1:

chrt - manipulate the real-time attributes of a process.
Only SCHED_FIFO, SCHED_OTHER and SCHED_RR are part of POSIX 1003.1b
Process Scheduling. The other scheduling attributes may be ignored on some systems.

 renice - alter priority of running processes.
 renice alters the scheduling priority of one or more running processes.
 The first argument is the priority value to be used. The other argu-
 ments are interpreted as process IDs (by default), process group IDs,
 user IDs, or user names. renice'ing a process group causes all pro-
 cesses in the process group to have their scheduling priority altered.
 renice'ing a user causes all processes owned by the user to have their
 scheduling priority altered.

taskset - set or retrieve a process's CPU affinity.
taskset is used to set or retrieve the CPU affinity of a running
process given its pid, or to launch a new command with a given CPU
affinity. CPU affinity is a scheduler property that "bonds" a process
to a given set of CPUs on the system. The Linux scheduler will honor
the given CPU affinity and the process will not run on any other CPUs.
Note that the Linux scheduler also supports natural CPU affinity: the
scheduler attempts to keep processes on the same CPU as long as practi-
cal for performance reasons. Therefore, forcing a specific CPU affin-
ity is useful only in certain applications.

The CPU affinity is represented as a bitmask, with the lowest order bit
corresponding to the first logical CPU and the highest order bit corre-
sponding to the last logical CPU. Not all CPUs may exist on a given
system but a mask may specify more CPUs than are present. A retrieved
mask will reflect only the bits that correspond to CPUs physically on
the system. If an invalid mask is given (i.e., one that corresponds to
no valid CPUs on the current system) an error is returned. The masks
may be specified in hexadecimal (with or without a leading "0x"), or as
a CPU list with the --cpu-list option. For example,

      0x00000001 is processor #0,

      0x00000003 is processors #0 and #1,

      0xFFFFFFFF is processors #0 through #31,

      32   is processors #1, #4, and #5,

      --cpu-list 0-2,6
           is processors #0, #1, #2, and #6.

   When taskset returns, it is guaranteed that the given program has been
   scheduled to a legal CPU.