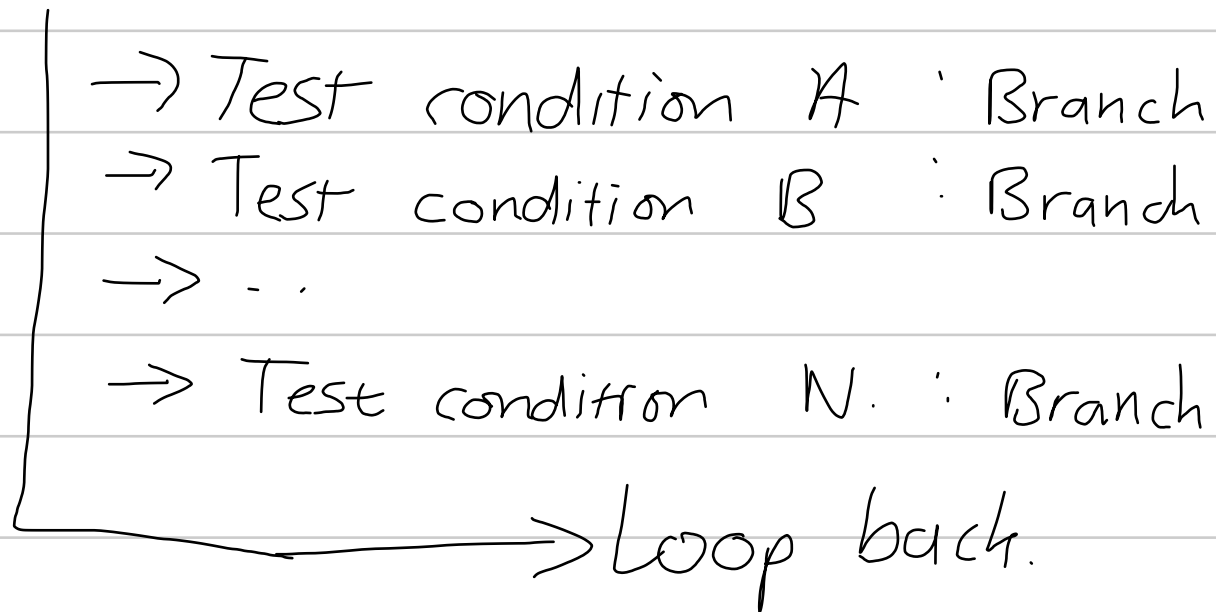


Programming Nuances:

Polling method \Rightarrow Test each input condition.
Branch to reactive code.



In control of polling order and inter-poll delay. However constrained by # of polled inputs.

Interrupt method:

Interrupt Vector \rightarrow

Response code
Return from interrupt.

Waiting / Low priority maintenance tasks.

Both high and low priority interrupt vectors
NR: define interrupt priority. (High can interrupt low.)

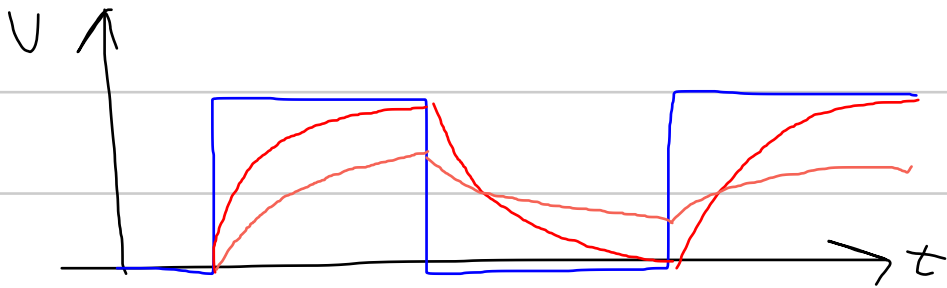
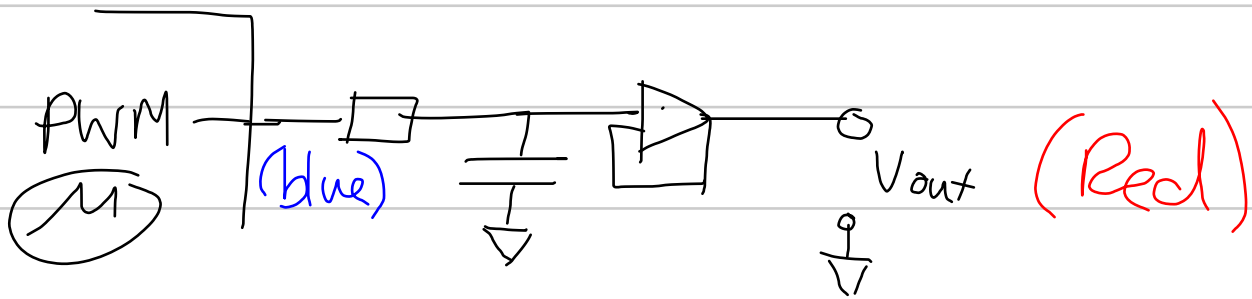
WDT and loops

Countdown at predefined rate Resets device at zero.

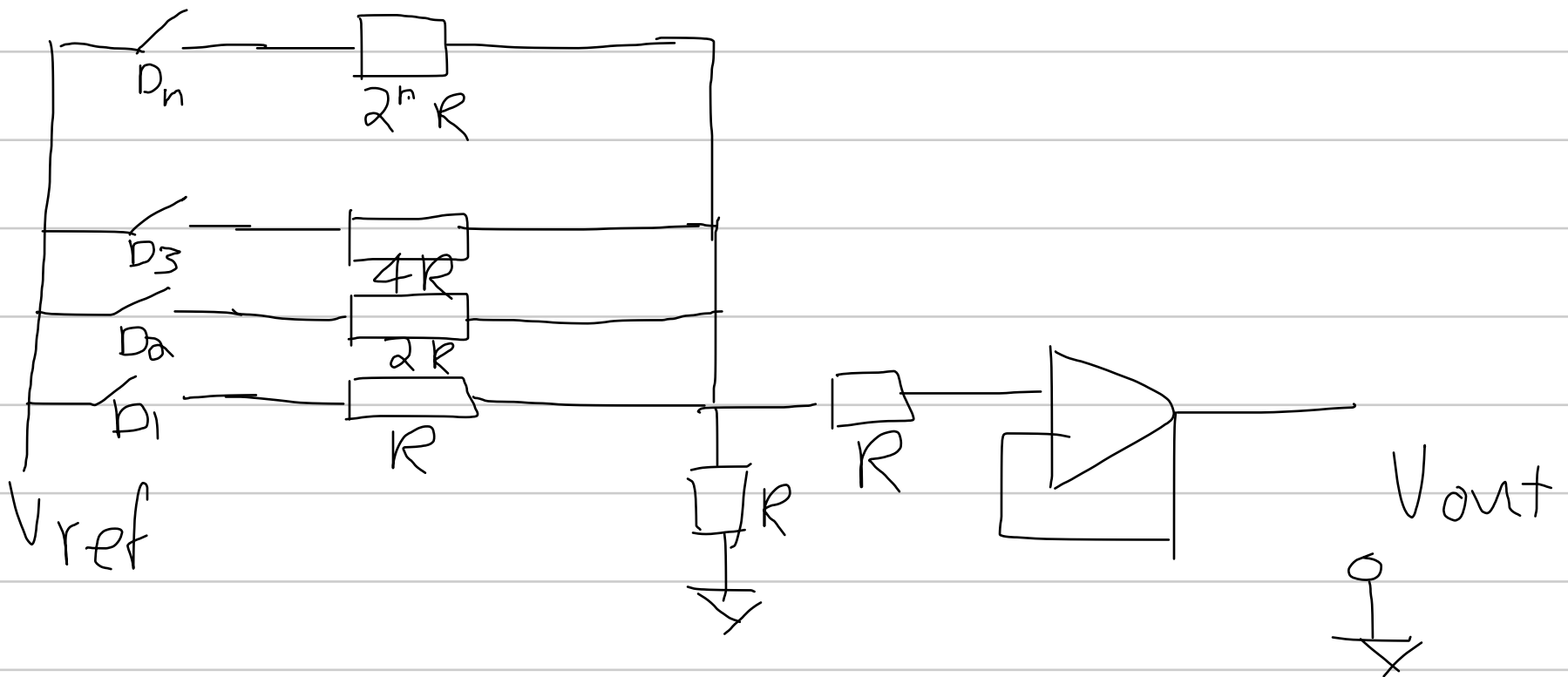
Counter re-initialised by 'clear watchdog timer' command. To be placed in main polling loop or waiting loop.

Don't forget to clear the timer in long sections of code.

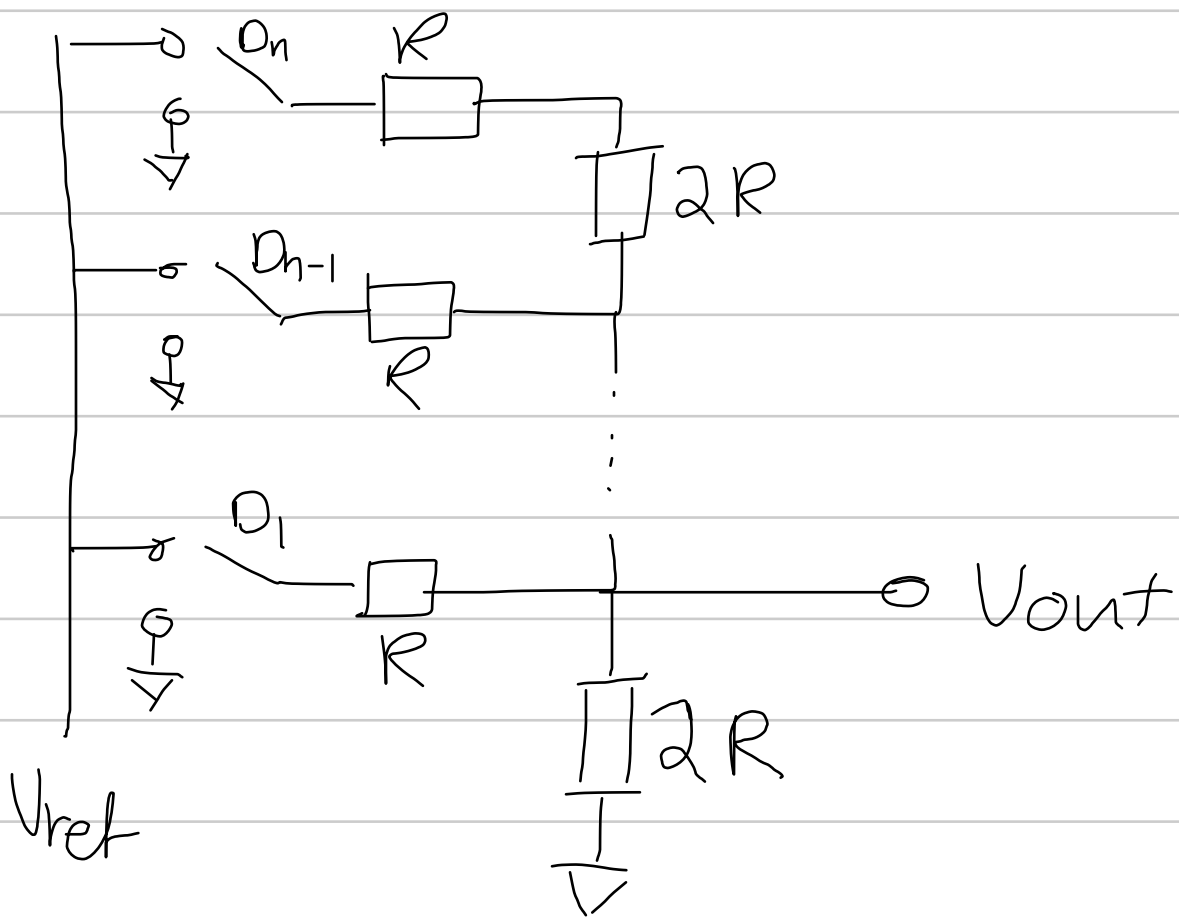
Digital to analog converters:



Summing network



R-2R Network

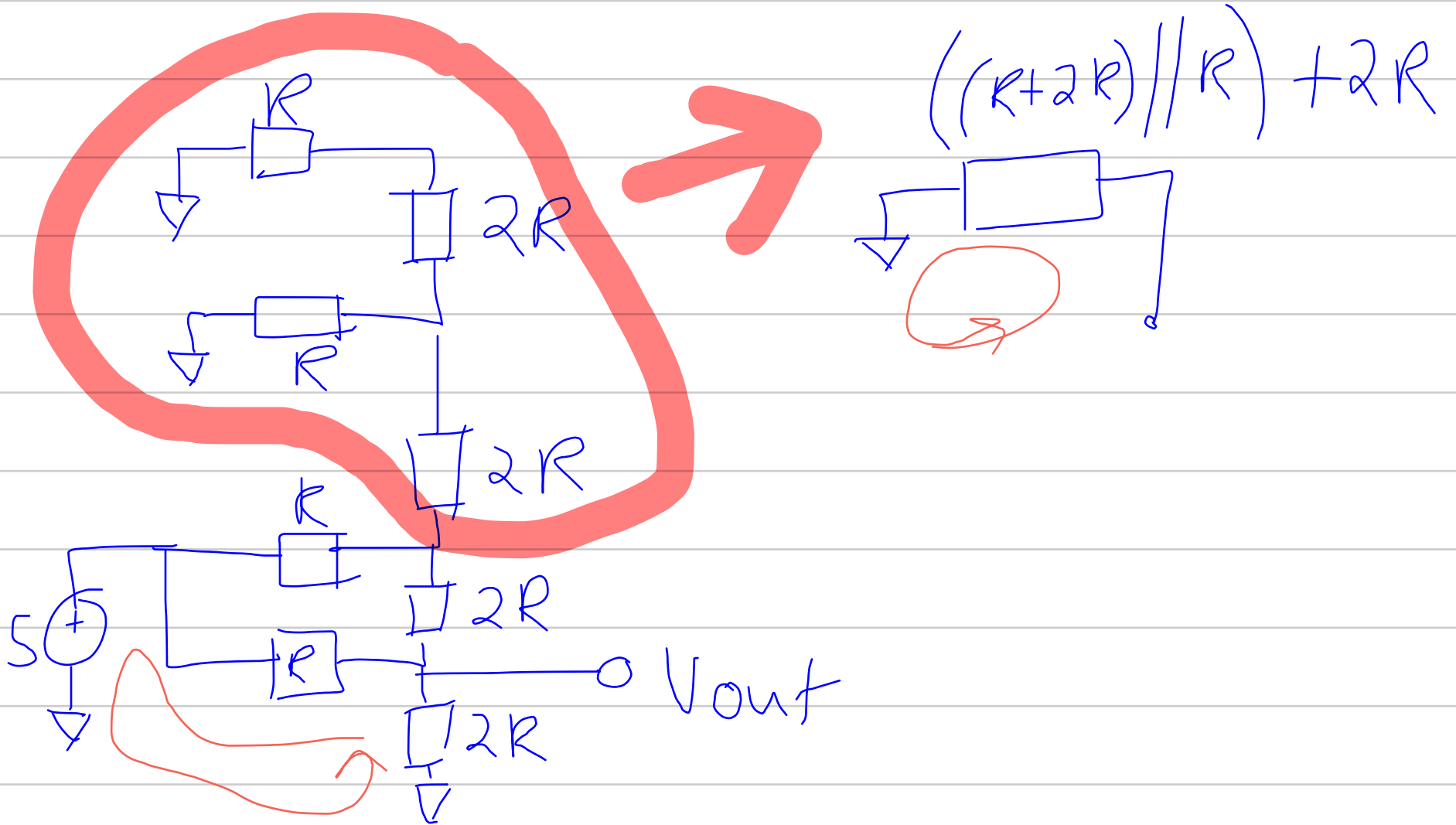


Example:

4 bits ($D_1 \rightarrow D_4$)

$V_{ref} = 5V$

D_1 and D_2 closed onto V_{ref}
 D_3 and D_4 closed onto Neutral



Analog to digital

Analog vs Analogue
↑
continuous signal in amplitude domain
↑
Ask at McD's.

Comparator

