

Design Plan for 7-seg

Important Parameters for mainLoop:

- Set 7-seg to display (output)
- Store memory for input string
- Store string of hex values for each 7seg (#\$0E, ...)

Logic:

- After mainLoop:
 - Set serial to read input
 - Load serial into accumulator A
 - Store serial into input string memory
- Once carriage return is hit:
 - Reset pointer to beginning of input string
 - Increment through string and load to accumulator A
 - Compare to number values in HEX
- If number is recognised:
 - Go to mapping function and compare A to 7seg mask to decipher which number
 - mapping function should iterate to itself if no masks are hit
- When CMPA = 0 (BEQ) break to writing function:
 - Point register y to string of hex values
 - Load string of hex values into accumulator and increment
 - Write the number recognised into the 7seg
 - RETURN TO mapping function and increment input string