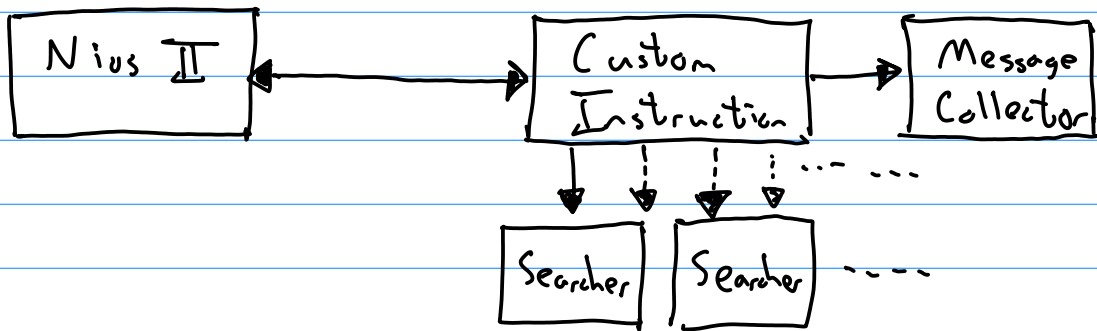
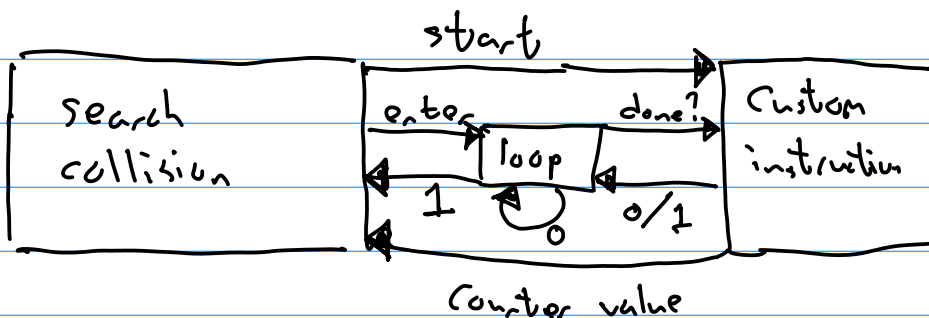
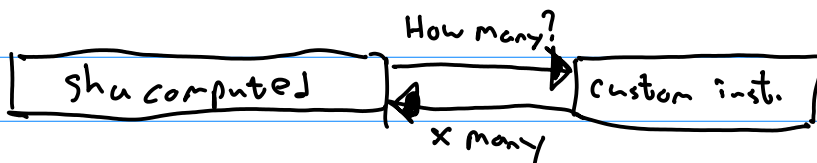
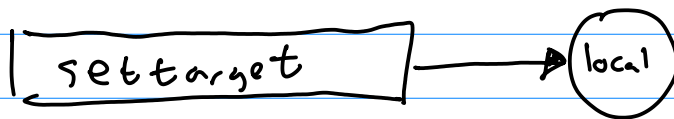
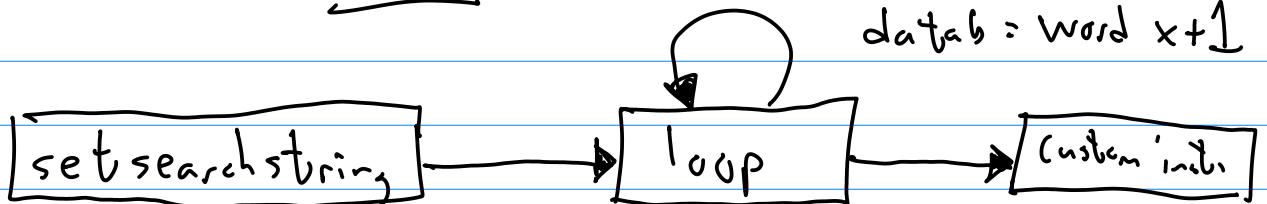


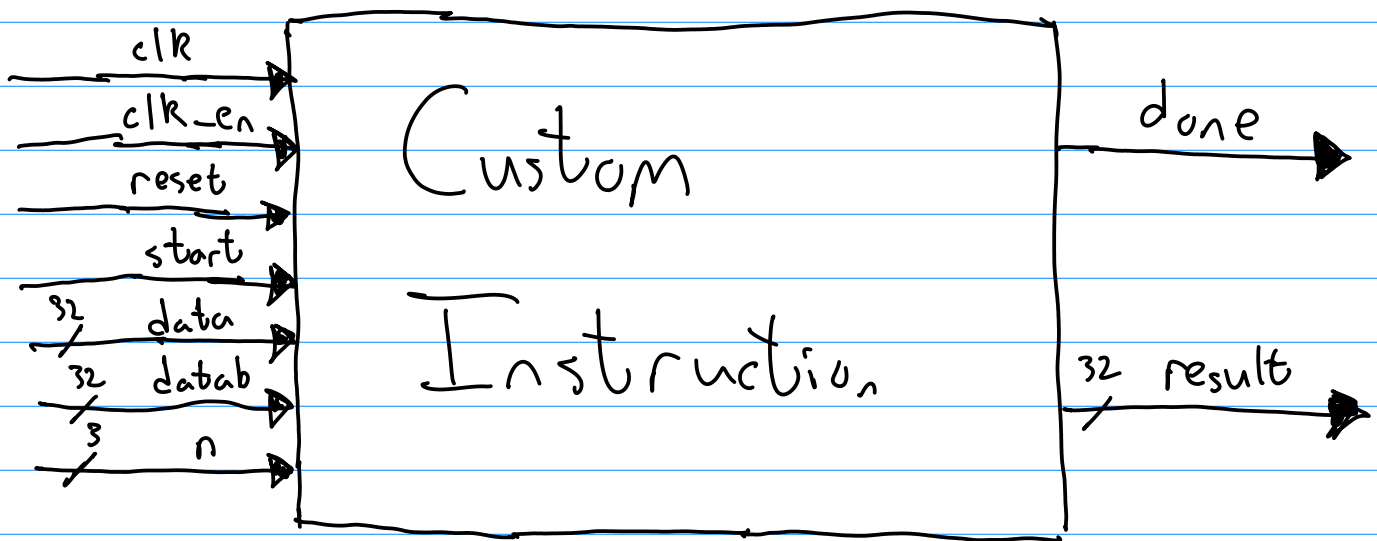
# Overall



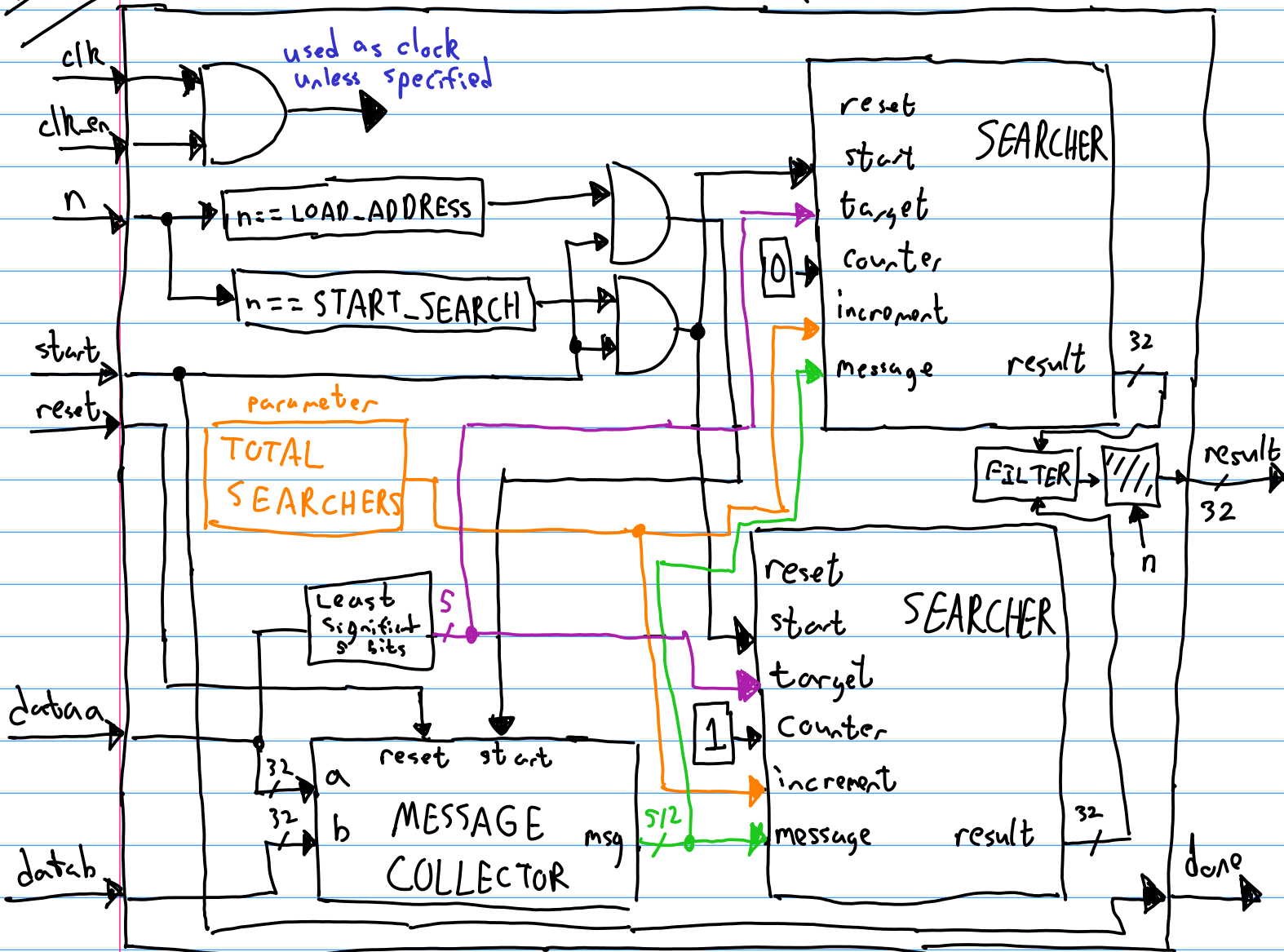
## Nios II



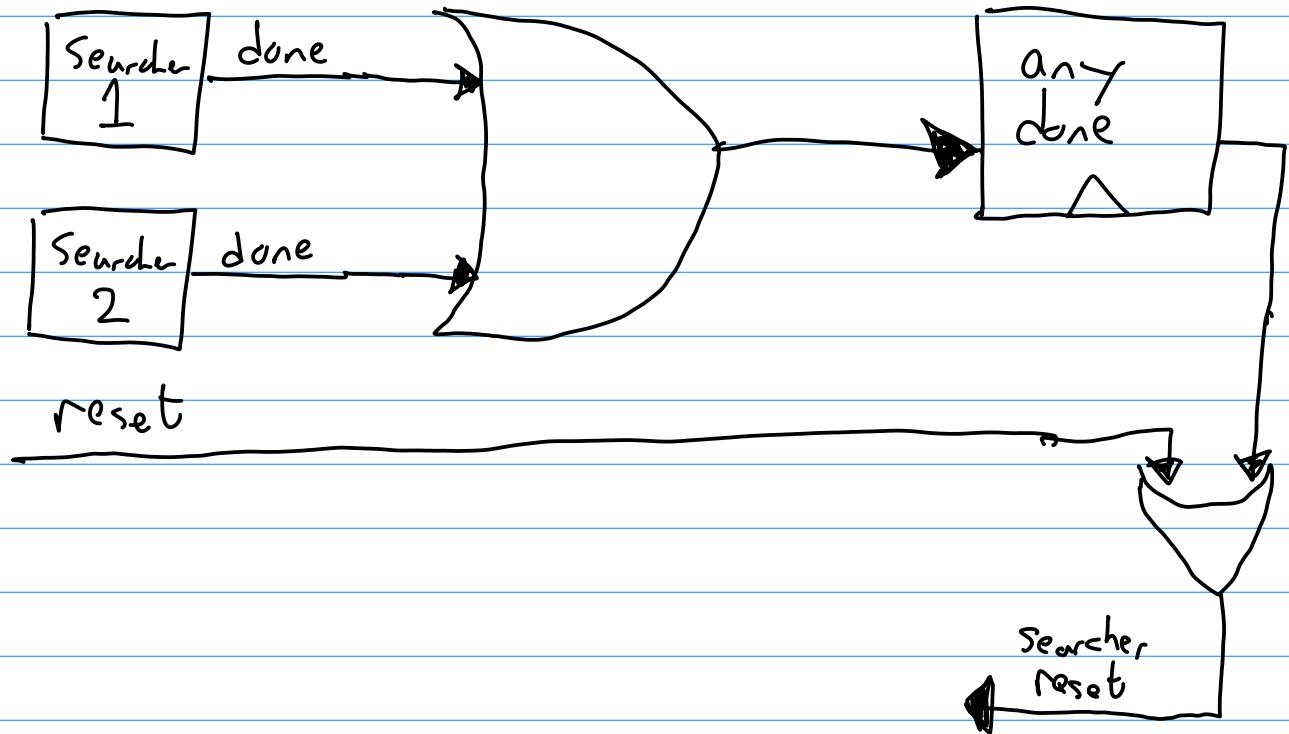
# Custom Instruction



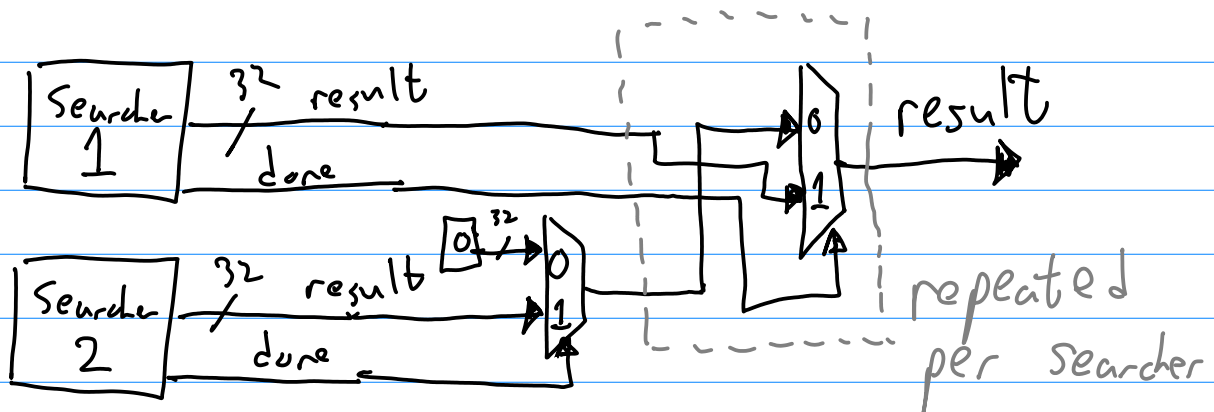
## Inside Double searcher example (partial)



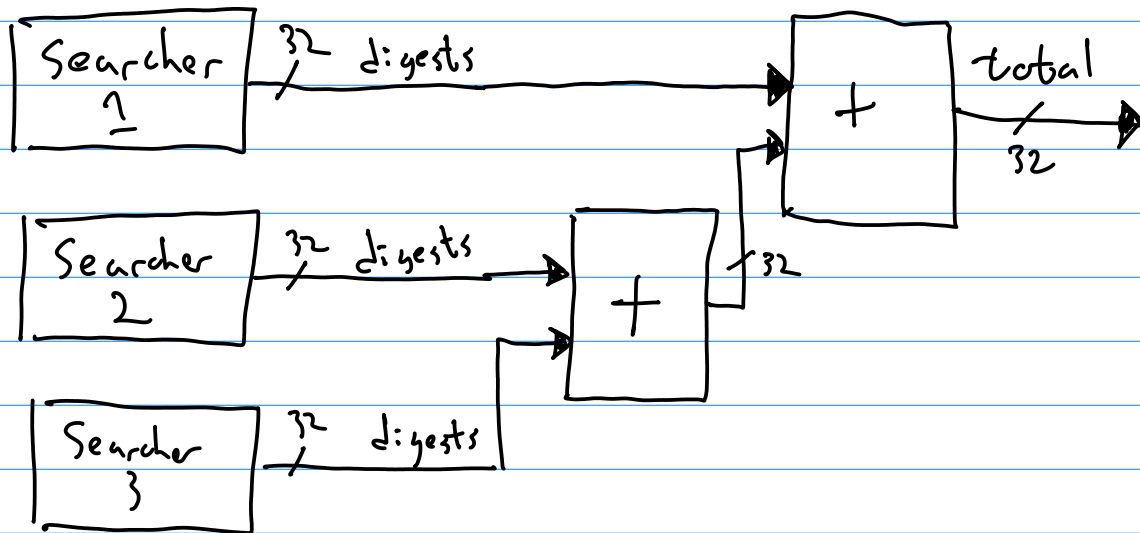
## Reset for Searchers



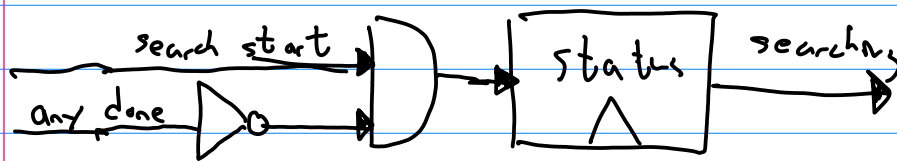
## Results Filtered



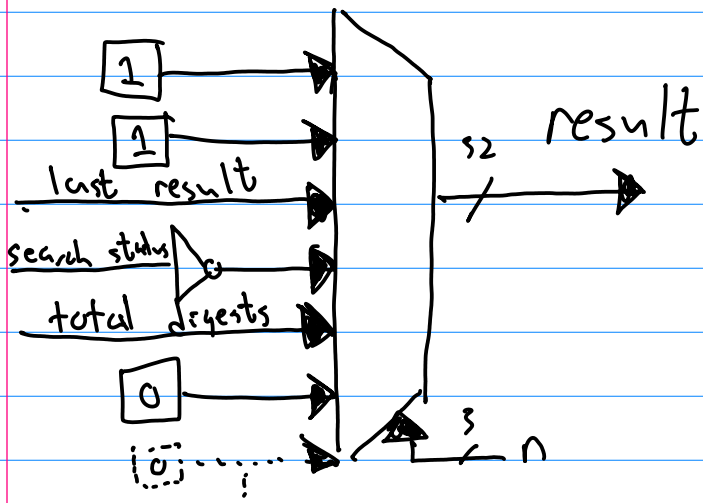
# Digests computed



# Search Status

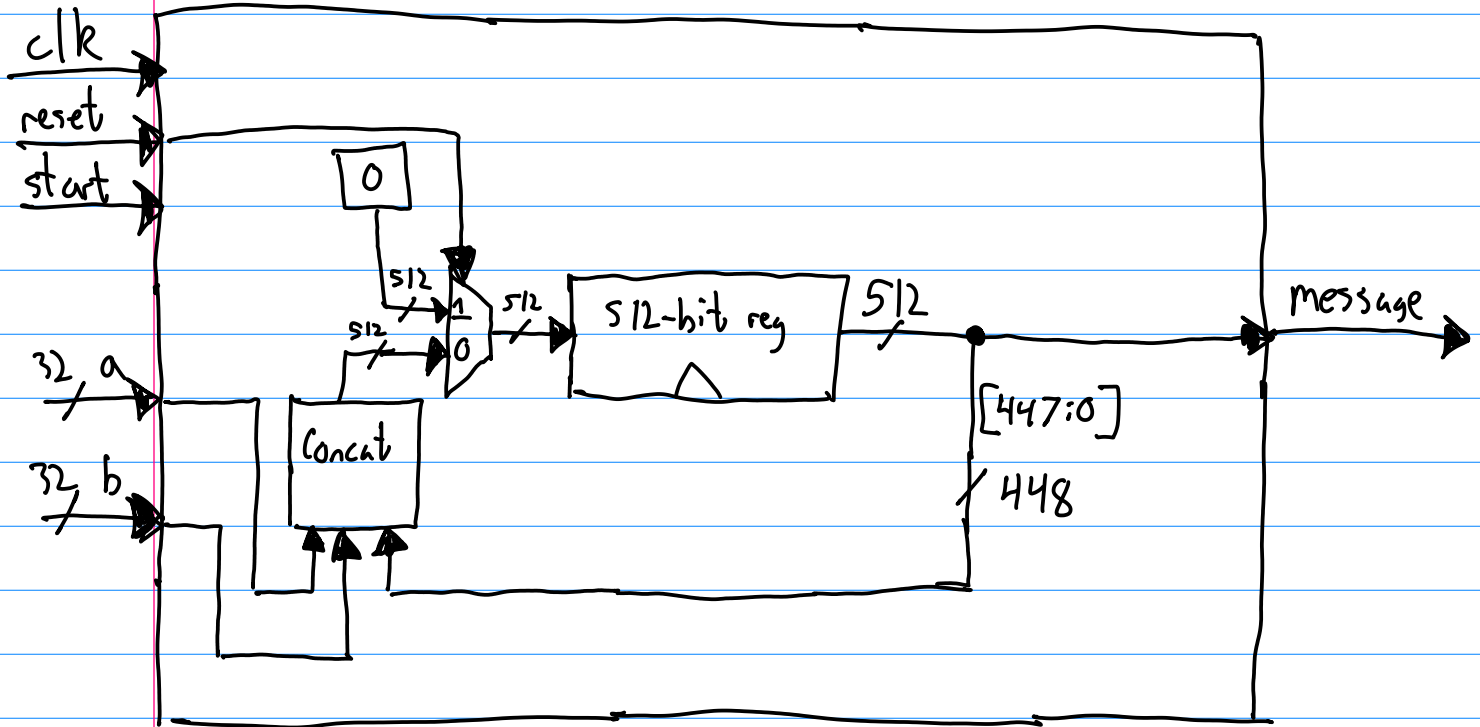


# Result

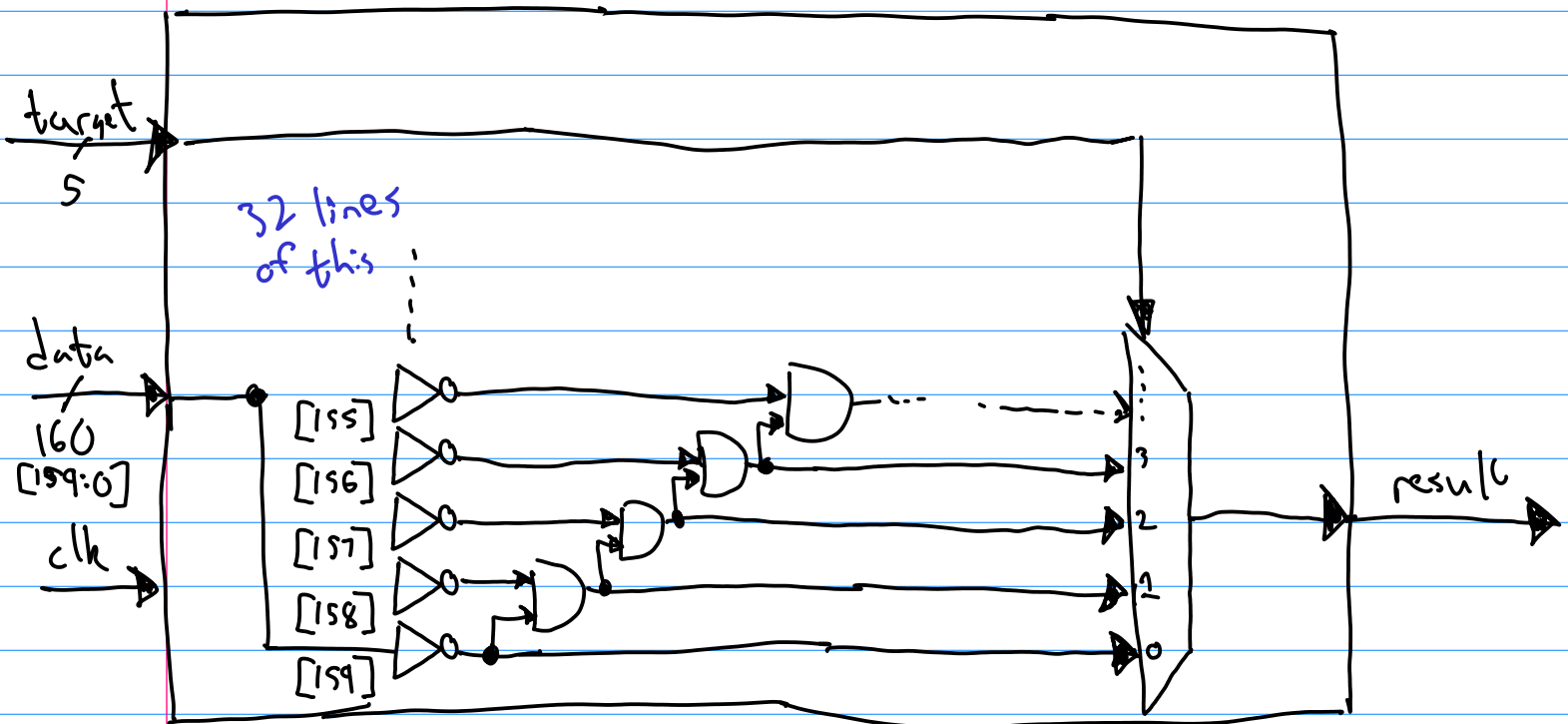


Base Address: 1  
 Start Search: 1  
 Get Collision: last result  
 Busy:  $\sim$ search status  
 Get Total Digests: total digests  
 ELSE: 0

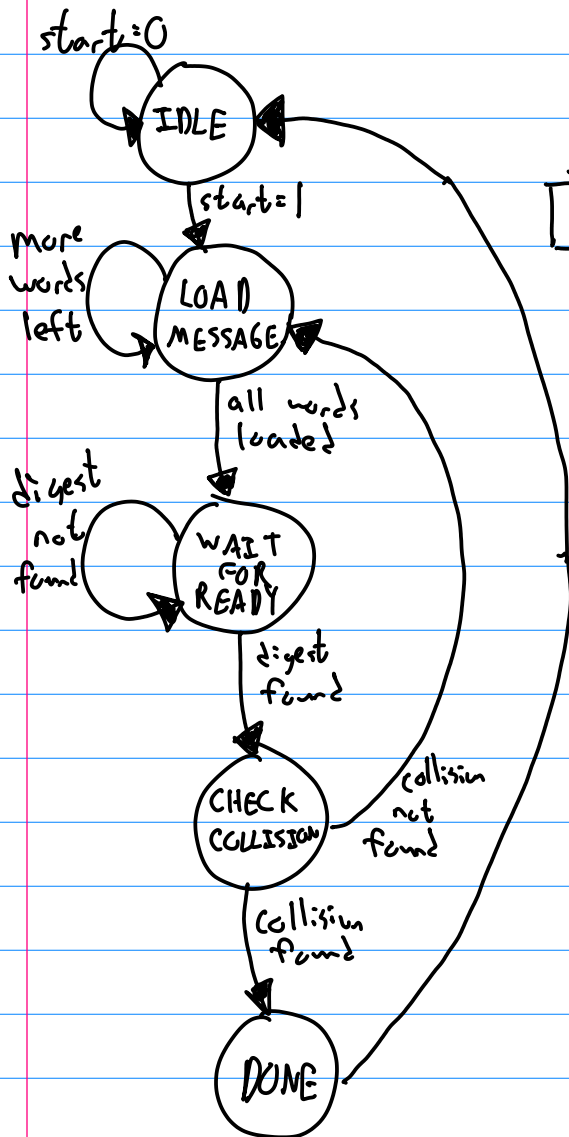
# Message Collector



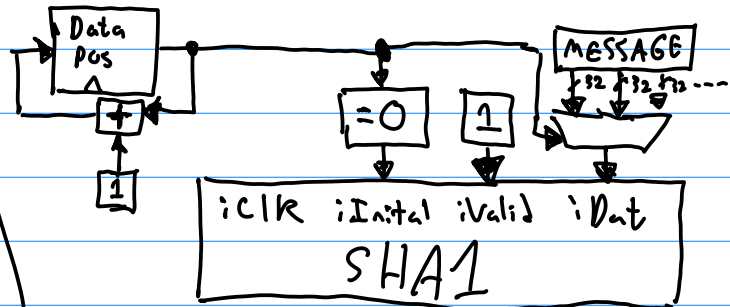
# Collision Checker



# Collision Searcher (state machine)



## LOAD MESSAGE



## CHECK COLLISION

