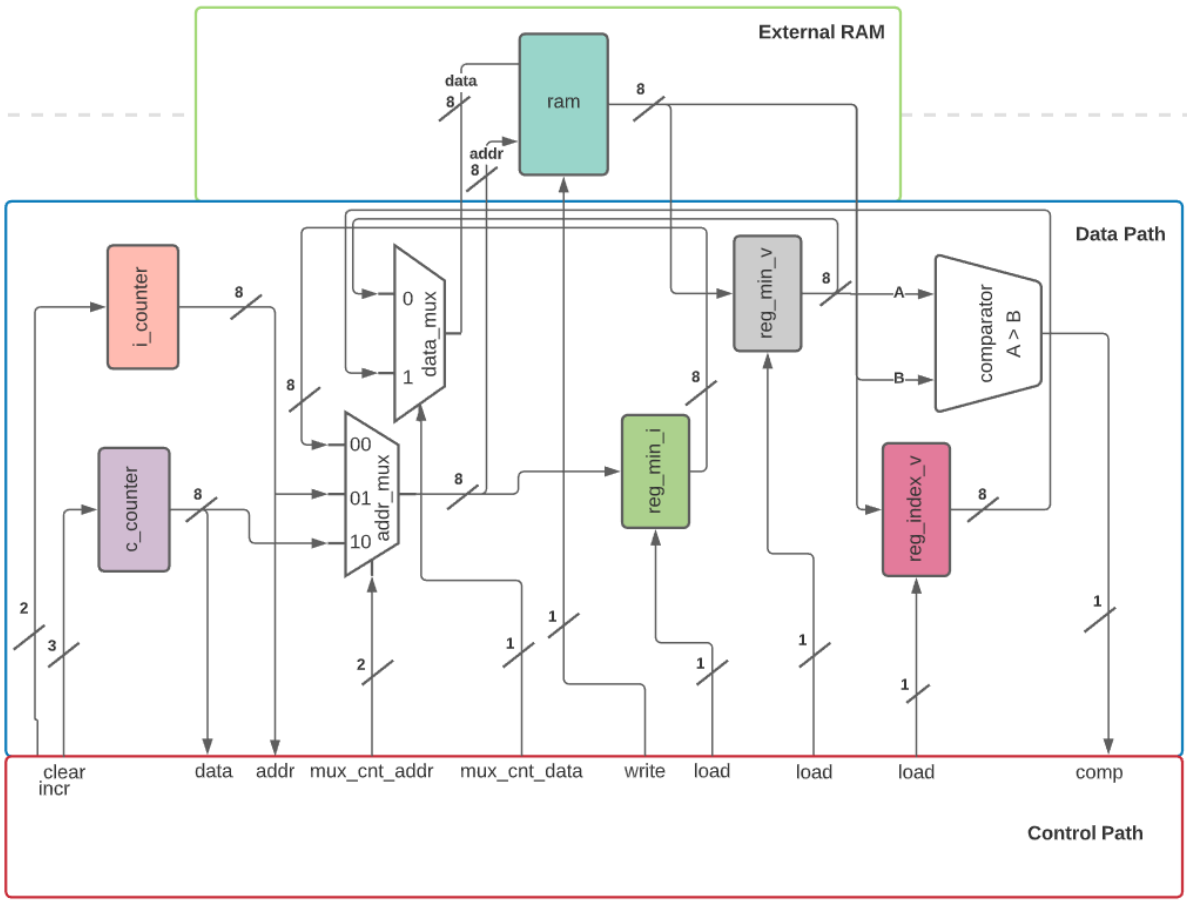
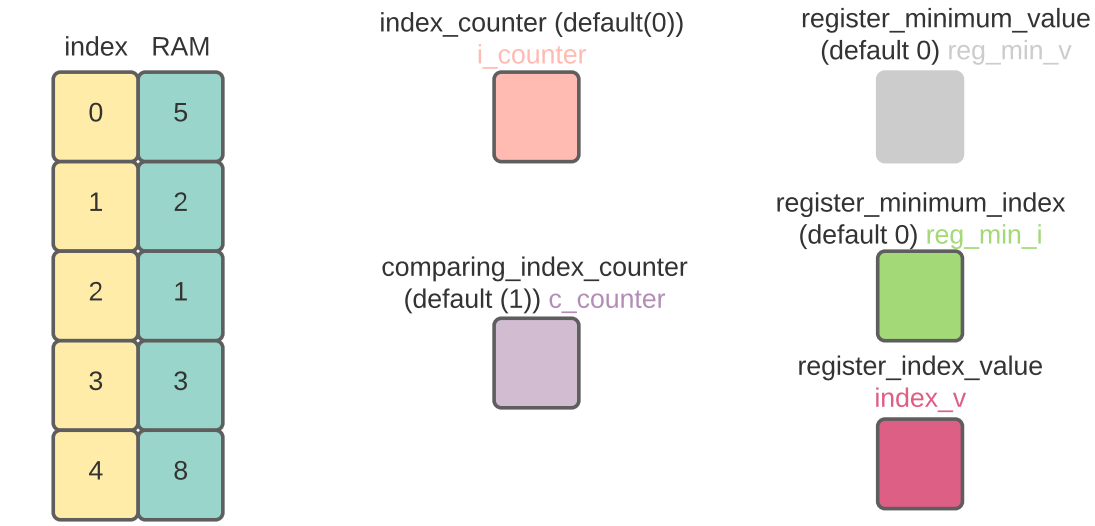
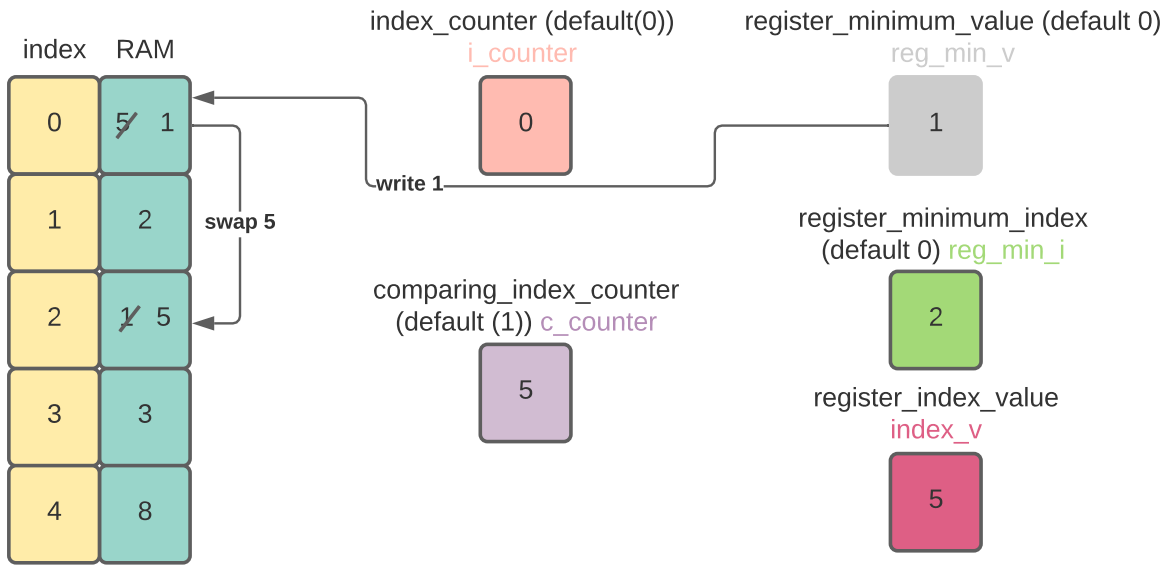

External RAM
ram
data
addr
8
Data Path
i_counter
c_counter
data_mux
addr_mux
00
01
10
reg_min_v
reg_min_i
reg_index_v
comparator
A > B
A
B
clear
incr
data
addr
mux_cnt_addr
mux_cnt_data
write
load
load
load
comp
Control Path

## Overview



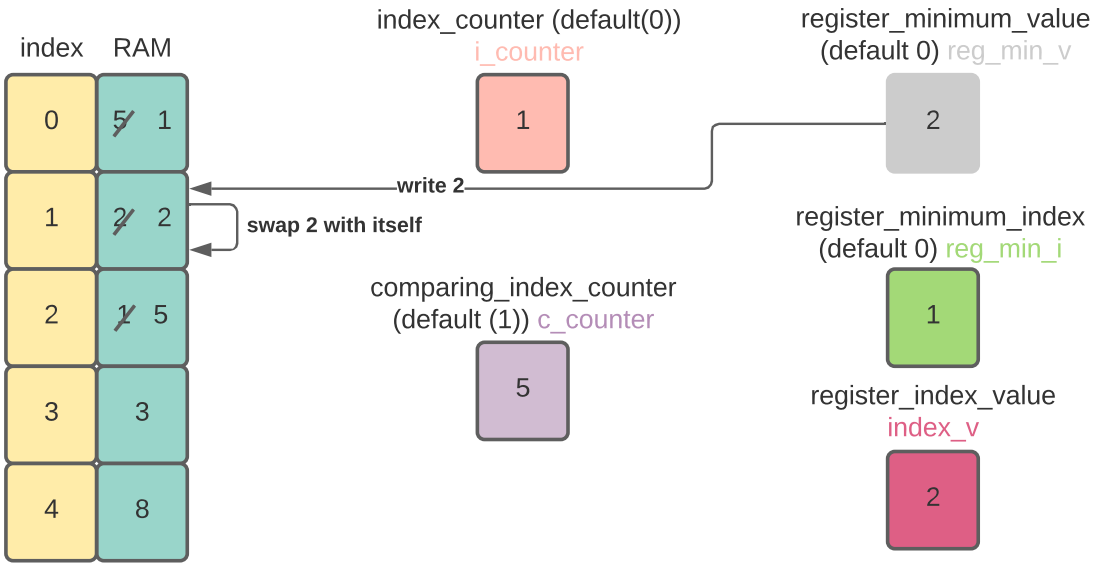

## Step 1

Find the minimum element in RAM [0...4] and place it at beginning



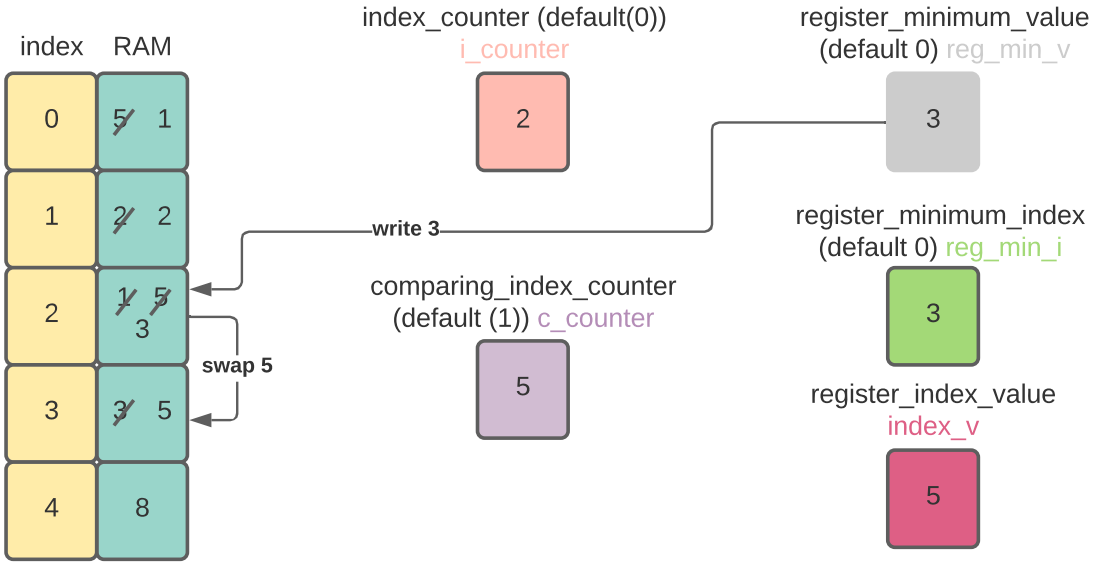

## Step 2

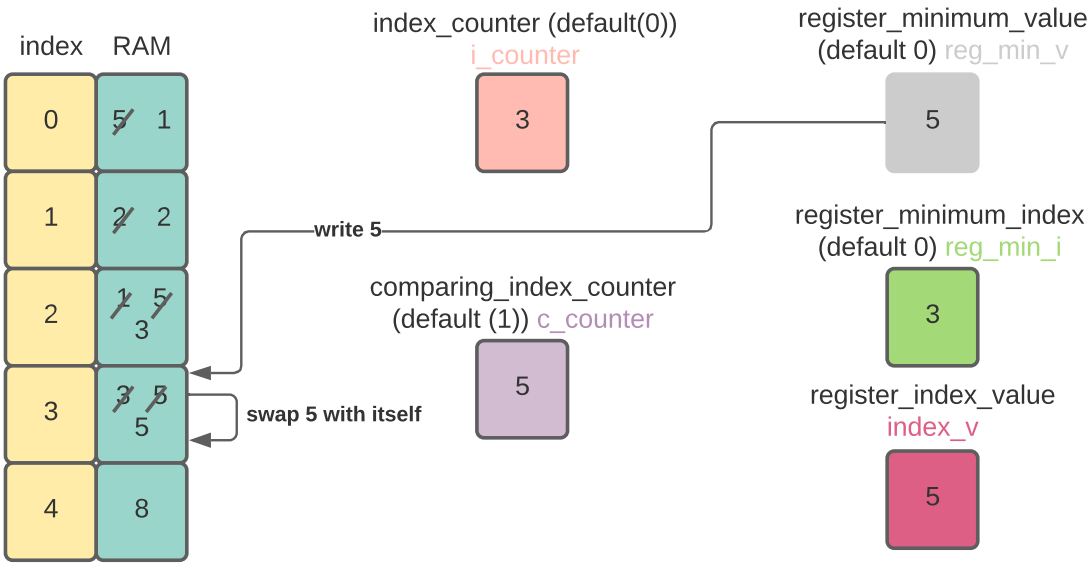
Find the minimum element in RAM [1...4] and place it at beginning [1...4]



## Step 3

Find the minimum element in RAM [2...4] and place it at beginning [2...4]




## Step 4

Find the minimum element in RAM [3...4] and place it at beginning [3...4]