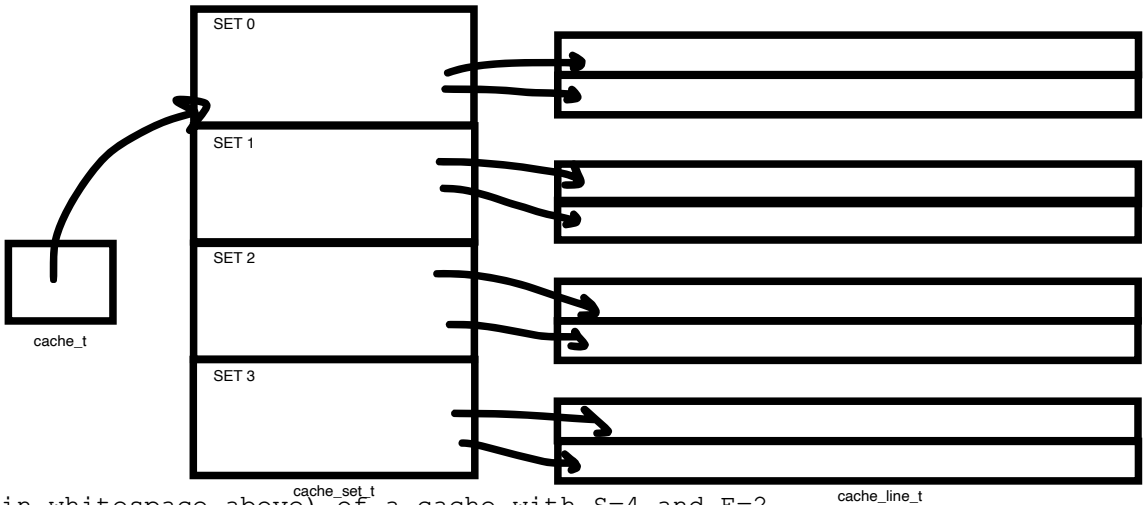p4B_worksheet.pdf: For given cache config, determine hits (H) and misses (M) for each instruction in the trace. All addresses are in hexadecimal. All sizes are 1,2,4, or 8 bytes.

./csim [-hv] -s <s> -E <E> -b <b> -t <tracefile>
-h: Optional help flag that prints usage info
-v: Optional verbose flag that displays trace info
-s <s>: Number of s bits for set index
-E <E>: number of lines per set (associativity)
-b <b>: Number of b bits for block offsets
-t <tracefile>: Name of the valgrind trace to replay
./csim -s 4 -E 2 -b 4 -t traces/trace1
operation address,size
L 0,1 M
L 1,1 H
L 2,1 H
L 3,1 H
S 4,1 H
L 5,1 H
S 6,1 H
L 7,1 H
S 8,1 H
L 9,1 H
S a,1 H
L b,1 H
S c,1 H
L d,1 H
S e,1 H
M f,1 H H
./csim -s 4 -E 1 -b 4 -t traces/trace2
L 10,1 M
M 20,1 M H
L 22,1 H
S 18,1 H
L 110,1 M
L 210,1 M
M 12,1 M H
./csim -s 2 -E 3 -b 3 -t traces/trace3
L 10,4 M
S 18,4 M
L 20,4 M
S 28,4 M
S 50,4 M
./csim -s 3 -E 4 -b 5 -t traces/trace4 (this only partical list of trace4)
S 00600aa0,1 M
I 004005b6,5
S 7ff000398,8 M
I 0040051e,1
S 7ff000390,8 H
I 0040051f,3
I 00400522,4
S 7ff000378,8 M
I 00400526,4
S 7ff000370,8 H
I 0040052a,7
S 7ff000384,4 H
I 00400531,2
I 00400581,4
L 7ff000384,4 H

SET 0
SET 1
SET 2
SET 3
cache_t
cache_set_t
cache_line_t

Draw memory diagram (in whitespace above) of a cache with S=4 and E=2.
Label struct members of cache_line_t and memory type of each mem location:
   cache_line_t, cache_set_t, cache_t