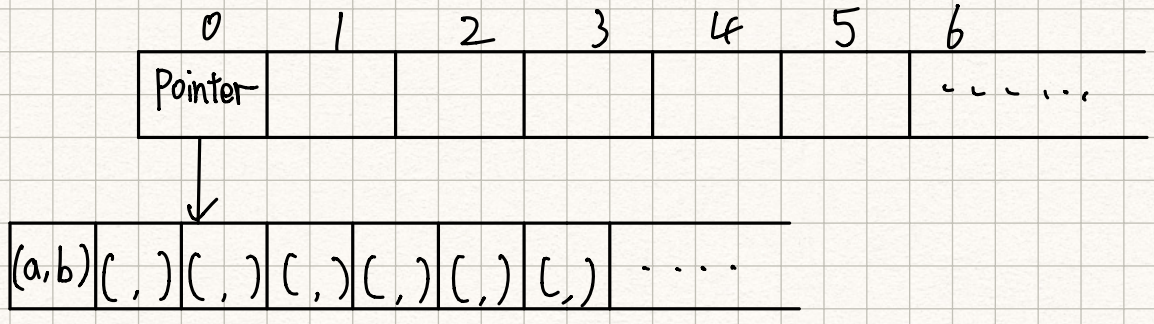
EXERCISE 2. Let R be a binary relation on the set of integers.

(i) Use an associative array to represent R such that it becomes easy to check whether R is symmetric.

(ii) Implement your symmetry checking algorithm.

total points: 11

(i) For pair (a,b), Use (a∧b)%10 as hash function, and each hash value correspond to the index of an Array. Each element in the array points to another list which contains all the pairs that share the same hash value.



(ii) See the code