

Editorial:

We can solve this problem using trie data structure. At each node of the trie we will store the i th bit of the number for query of type 0. To solve the query of type 1 we will store the indexes of the number that pass through that node. When we go down the tree during a query and maximising the xor, we go in a direction that contains at least one index in range **L** to **R**, otherwise we go in the other direction. To search if atleast one index is within the stored indexes we will use binary search.