3324. construct the Minimum Bitwise

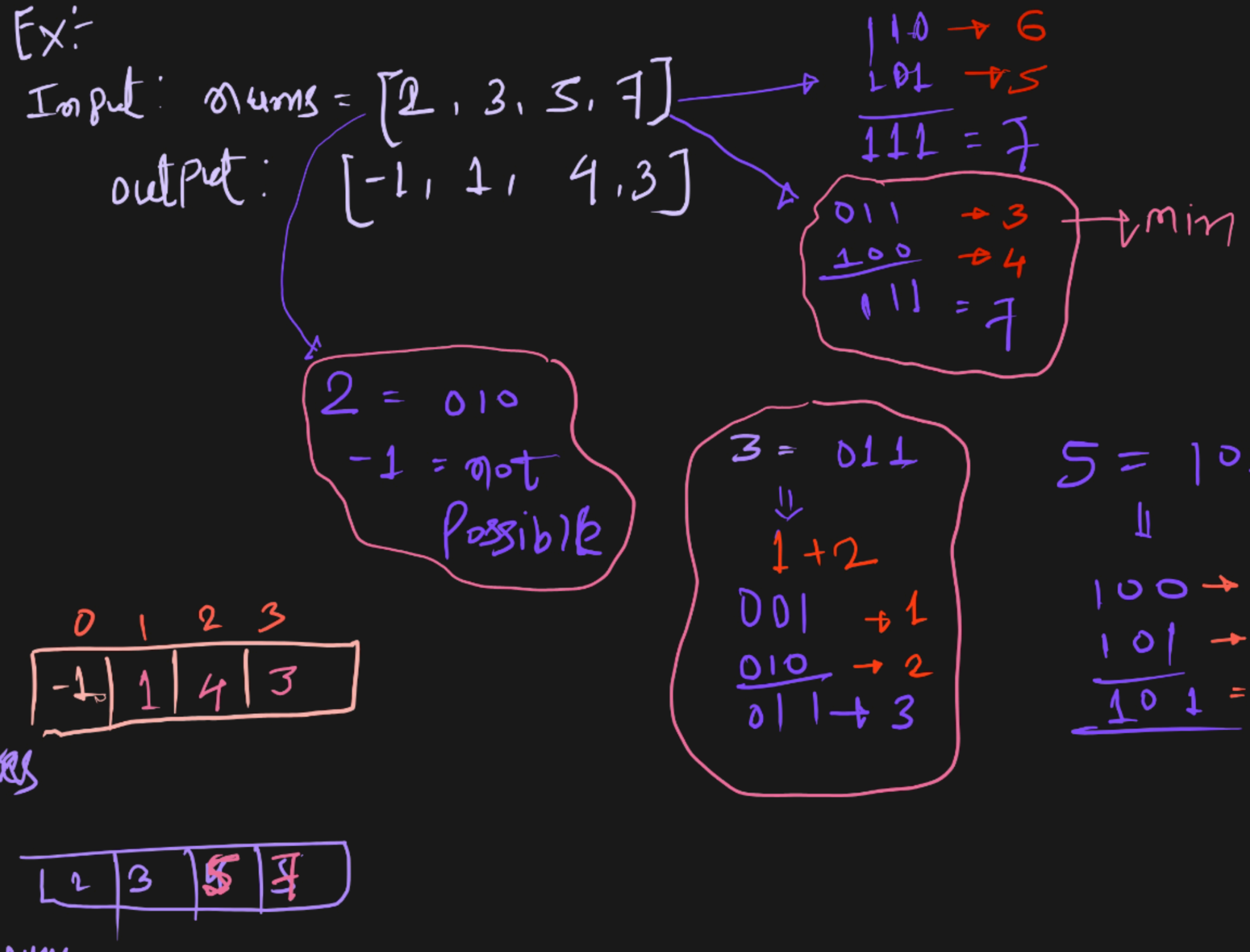
3314. Construct the Minimum Bitwise Array I

- Given integer array nums consisting of n Prime integers.
- construct ans array of length n such that for each index i, the bitwise OR of ans[i] and ans[i+1] is equal to nums[i].
- we must Minimize each value of ans[i] in resulting array.
- if it is not possible to find such value for ans[i], then ans[i] = -1.

Ex:-

Input: nums = [2, 3, 5, 7]

output: [-1, 1, 4, 3]



→ constraints :

$1 <= nums.length <= 100$

we can go for Brute force

(0) initialize Res vec.

```
vector<int> res(n, -1);
```

(0) // Traverse and fill values.

```
for(int i=0; i<n; i++){
    for(int val = 0; val<=nums[i]; val++){
        if((val | (val+1)) == nums[i]){
            res[i] = val;
            break;
        }
    }
}
return res;
```

T.C :- $O(n * max(nums))$

S.C :- $O(n)$ // res vec.