Observation:

To be change

1. Digits don't repeat in the generated array.
   - ↳ Hence, "permutation" → Search method on Google.
2. Do there exist "winning strategy"?
   - ↳ MasterMind
3. If seems like Max len is 10 given "{0, 1, ..., 9}" are the only digits required
   - ↳ Hence: 10^4 Total Combo can be generated.
   - ↳ ∴ Can just assum the array ① is the only possible input.
   - ↳ Hence for all possible with Difficulty = 4
     - ⇒ $10 \times 9 \times 8 \times 7 = 5040$ Max possible Candidates #.

Logic: if secret: [1, 0, 3, 7]

Case 1: No Hit, No Blow

First iter: Our Guess: [2, 4, 5, 6]

⇒ g([2, 4, 5, 6]) = 0

So we know 2, 4, 5, 6 never appear in the secret

Remove all permutations with [2, 4, 5, 6]

⇒ Hence we only have 6 × 5 × 4 × 3

360 possible candidates now

↳ keep iter until hits = Diff

Case 2 = 1 hit, No blow

⇒ [1, 2, 4, 8]

∴ 1 digit is correct position H, B

⇒ q([1, 2, 4, 8]) ⇒ (1, 0)

so we need to filter out all candidates that will produce q(candidates_1) = (1, 0)

c = candidates

↳ for c in

if getHit(c, guess1) == hits

& getBlows(c, guess1) == blows

⇒ append(newCar, c)

else neve append.

Loop until found hits : Diff.