

Problem1 (Easy)

Two Sum :

Given a non-repetitive ascending list with length n , and an integer target value t . Find all the i,j which satisfy $x_i + x_j = t$, and print them out. ($2 \leq n \leq 10^6$)

Hint :

Bisection search or Double Printer

Problem2 (Mid)

Floyd Algorithm :

Read the file and build a weighed directed-graph. Use Floyd algorithm to calculate the distance from point 1 to point n. ($2 \leq n \leq 100$)

Problem3 (Hard)

Sneak: Simulate a sneak game and print the game results.

Input:

- A matrix with type char (the map). 'x' represents a rock, '-' represents a space, '#' represents the body of sneak. '@' represent the head of the sneak.
- A sequence with type int (the motions). '0,1,2,3' represent to move to up/down/left/right correspondingly for one step.

Rules:

A greedy snake will fail when the head and the stone overlap, the head goes beyond the boundary, or the head overlaps the body.

Task:

Output the the result of the game:

If it failed, output the running time of the game.

If it didn't fail, output the final position of the head (in the form "%d, %d").