Requirements

- Go 1.20+ (any recent Go should work)

Build

```
go build 9MI0600147.go
```

Run

```
./9MI0600147 < input.txt
```

or

Input format (from STDIN)

The program expects **three things** in this order, separated by spaces/newlines:

1. N — total number of **numbered** tiles (the board is k x k where k = sqrt(N+1)).

   - Example: for a 3x3 board, N = 8; for 4x4, N = 15.

2. I — the **target index** (0-based) where the blank 0 should be in the **goal** configuration.

   - If I is out of range, the blank's goal position defaults to the **last cell**.

3. tiles — a flat list of N+1 integers describing the **starting** board, row-major.

   - It must contain all values 0..N exactly once; 0 is the blank.