Data Structures (in C++)

- Climate Crisis -

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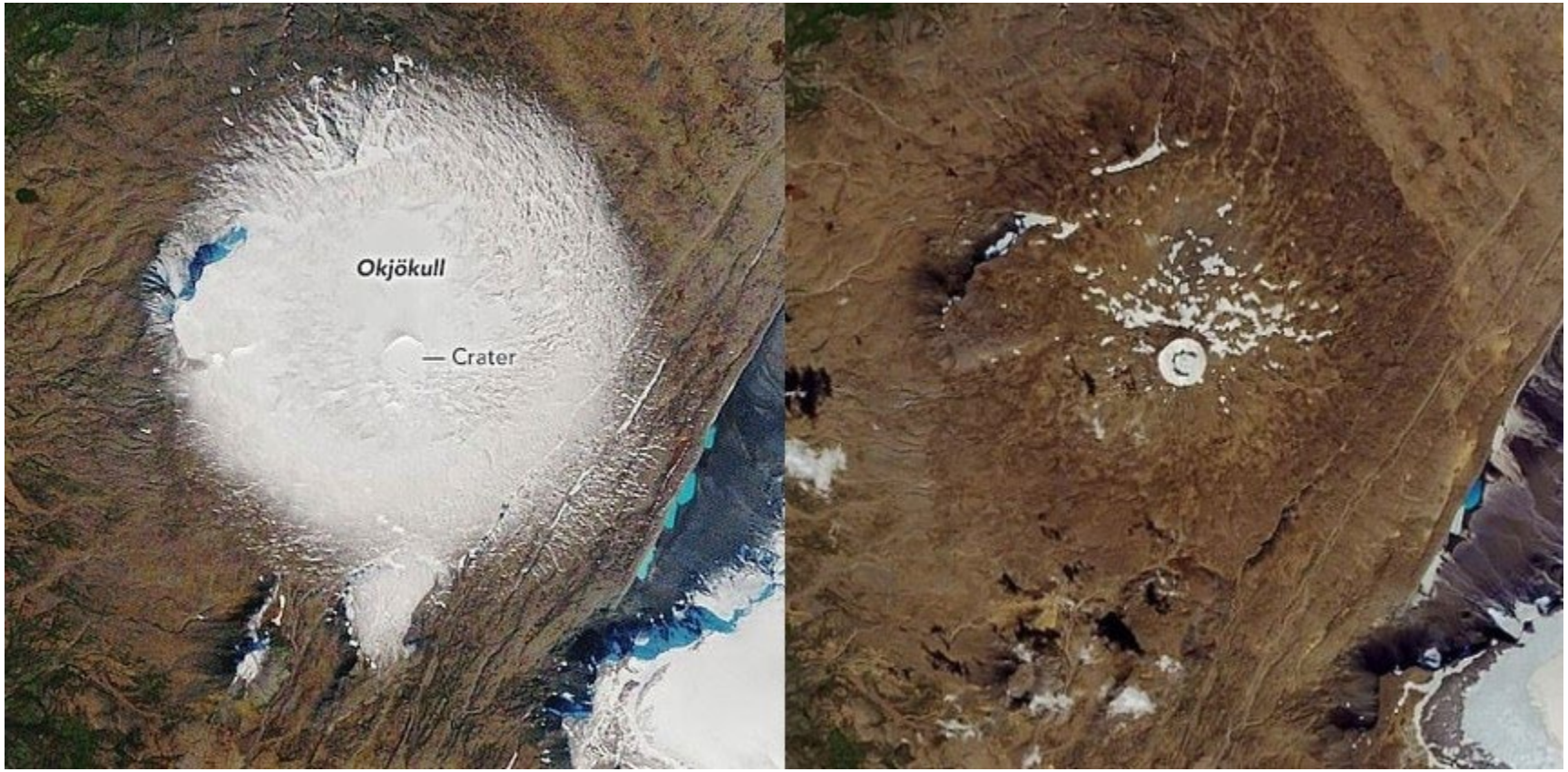
Climate Crisis



<1986년(왼쪽)과 2019년 랜드샛 8호 위성이 관측한 아이슬란드의 오크요쿡흐을 빙하.
산 전체를 뒤덮었던 빙하가 녹아 일부 밖에 남지 않았다. 사진=NASA>

https://www.etnews.com/20211104000256

Climate Crisis

- Global warming is the gradual heating of the Earth's surface that increases heat-trapping greenhouse gas levels in Earth's atmosphere.

- As a result of global warming, glaciers and sea ice are melting.

- Your task is to predict how many years are left until the given glacier disappears.

- Conditions:
  - Each piece of the glacier will disappear in the next year if it is adjacent to iceless areas.
    - Adjacency must be checked only for 4-neighbor (*i.e.*, left, right, top, bottom)
  - However, iceless areas trapped by glaciers do not melt glaciers.
  - There is no glacier in the outermost rows and columns.

- Please refer to the following example for more details.

https://climate.nasa.gov/global-warming-vs-climate-change/

Climate Crisis

- Input format:

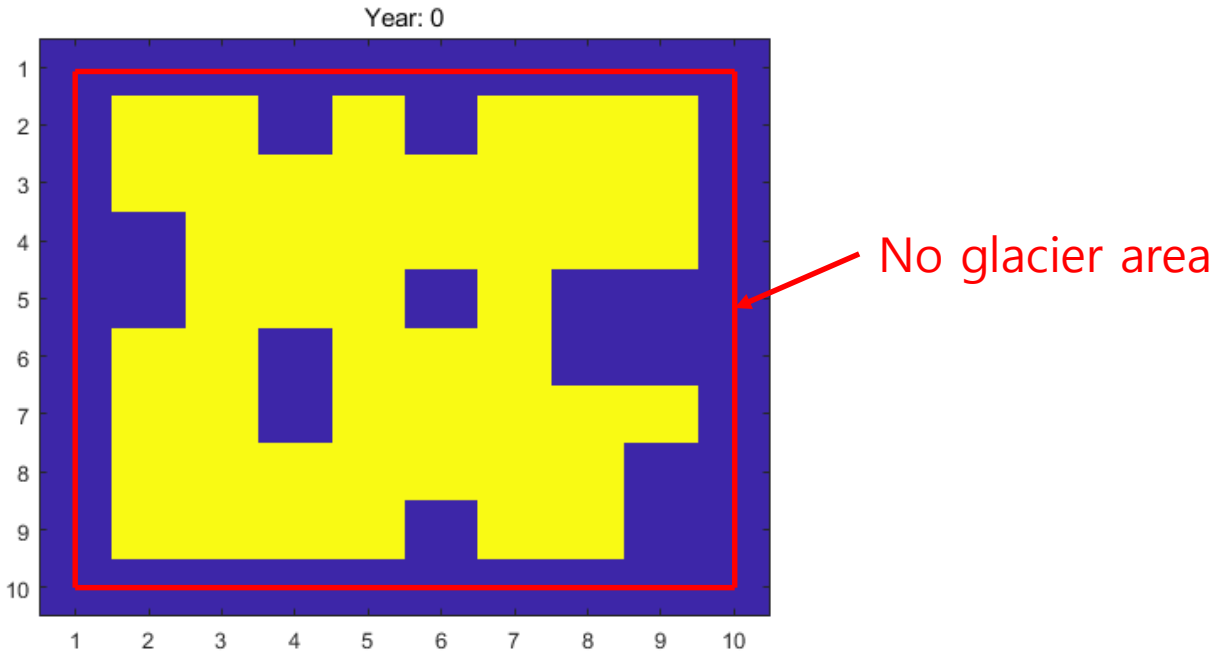
input.1.txt - Wir

파일(F) 편집(E)

```
10 10
0000000000
0110101110
0111111110
0011111110
0011101000
0110111000
0110111110
0111111100
0111101100
0000000000
```

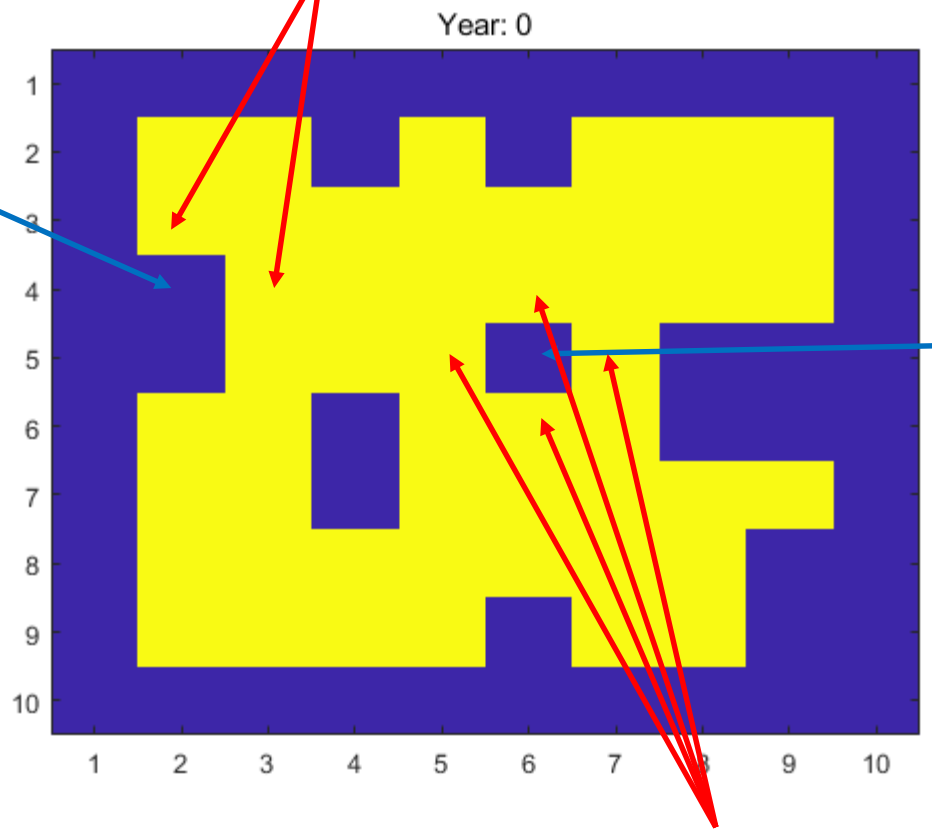
Height of the Map (H) Width of the Map (W)

H x W glacier map (0 : iceless area, 1 : glacier)



Climate Crisis

These glaciers will disappear in the next year

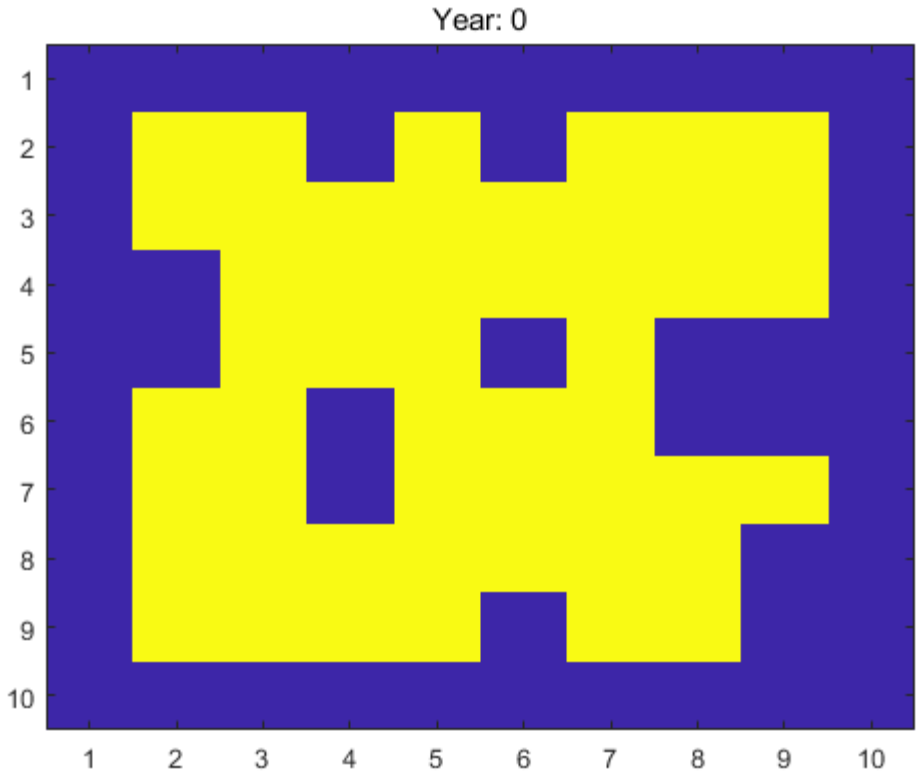


iceless area that can melt adjacent glaciers

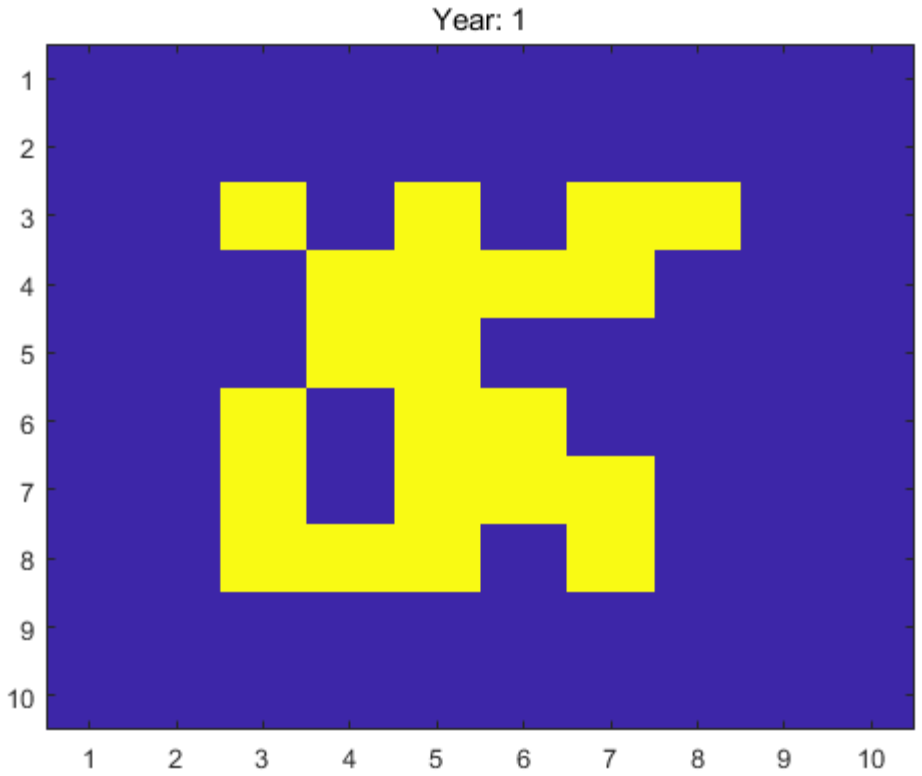
iceless area that does not affect glaciers (Because it is trapped by glaciers)

These glaciers will not disappear in the next year

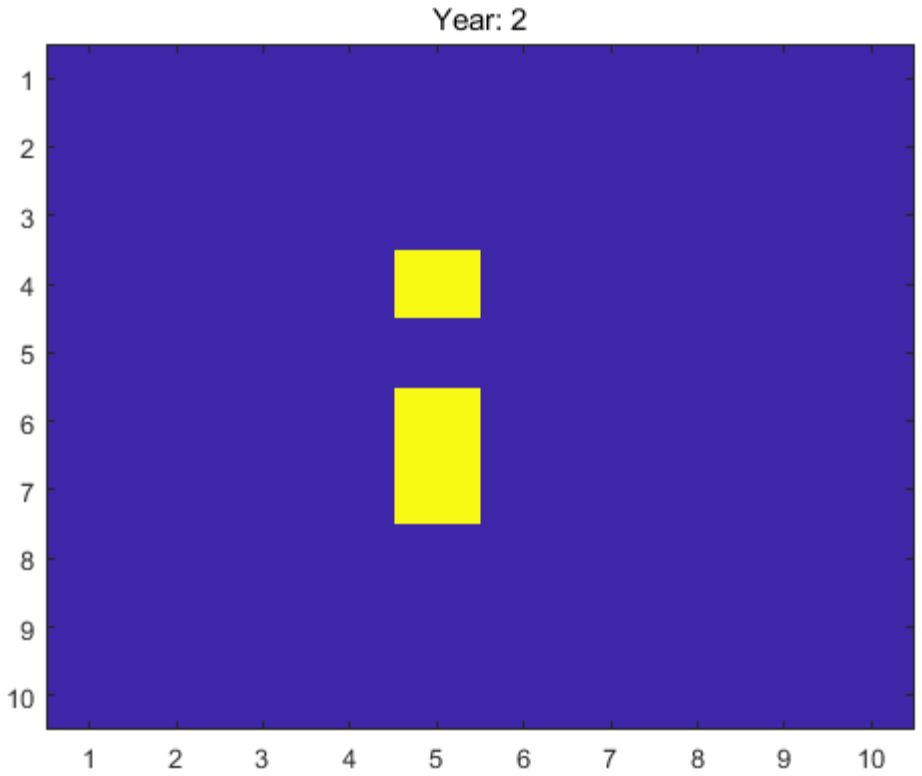
Climate Crisis



Climate Crisis



Climate Crisis



Climate Crisis

- It will take 3 years for this glacier to totally disappear.
- Therefore, your output is:

  3