

Editorial - Best Pile

First subtask

If each pile only fills one cell, that means the maximum possible area is 5. (top + four sides). Edge case exists when there are zero blocks on the whole grid. In that case the answer is 0.

Second subtask

It is guaranteed that there's only one pile in the whole grid. The problem is simplified to just find the area of the object. There can be numerous ways to find the area. Only one is discussed here.

- Area of a block assuming there are no adjacent blocks = $\text{height} * 4 + 1$
- If there are adjacent blocks, we have to subtract the area covered by those blocks.
- Area covered by adjacent block = minimum of current block's height and adjacent block's height
- Go through each of the four sides and subtract this value to get the net surface area by the block.
- Repeat this for every block in the grid to get the total area.

Third Subtask

You have to separate blocks into piles, and find the surface area of each as described in the previous subtask. And the answer is the maximum of them.

To separate blocks into piles, consider the grid as a graph. Two adjacent cells are connected if both cells have non zero block heights. Then solve it by finding [connected components](#)

