

Plocka Äpplen

Insight

We never want to visit a tree twice since there will already be no apples on it. Therefore we will never move to the left.

Solution

The solution will use a recursive function

```
def count(r, c, visited_row, visited_count):
```

where r is the current row, c is the current column, $visited_count$ is the number of already visited apple trees, $visited_row$ is a variable indicating whether the cell in the same column and the other row has already been visited.

It is necessary to use the $visited_row$ variable since we don't want to go to a cell we've already been at (don't want to go up and then down to the same cell).

Terminate the recursive function if there are no moves left (if $visited_count = k$) or if we are outside the grid ($c \geq n - 1$). In that case return 0.

Otherwise try to move to the right or change the row number (if possible). The answer is the sum of the maximum of $count$ for those cells and the number of apples on the current tree.