Lec-44

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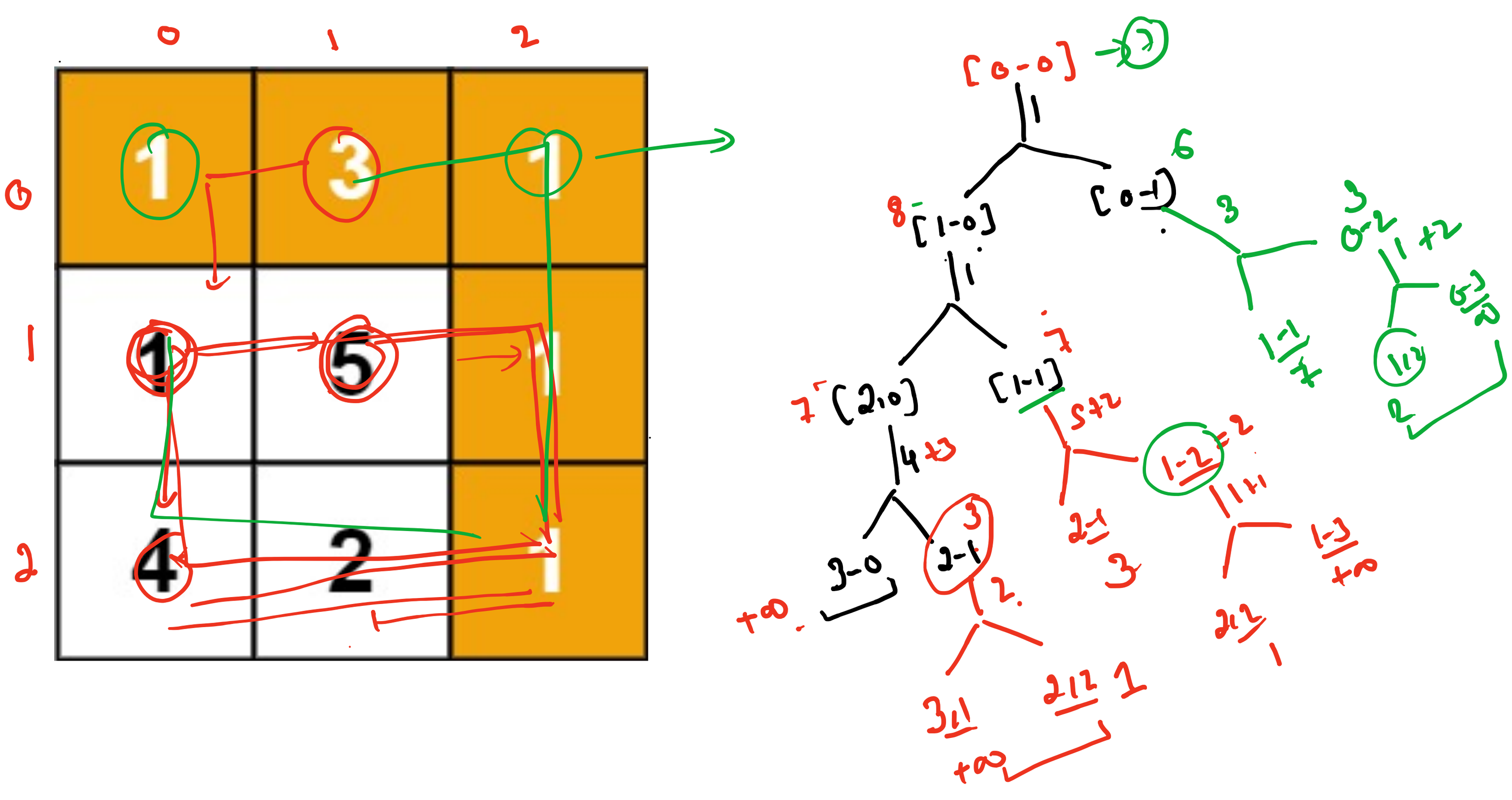
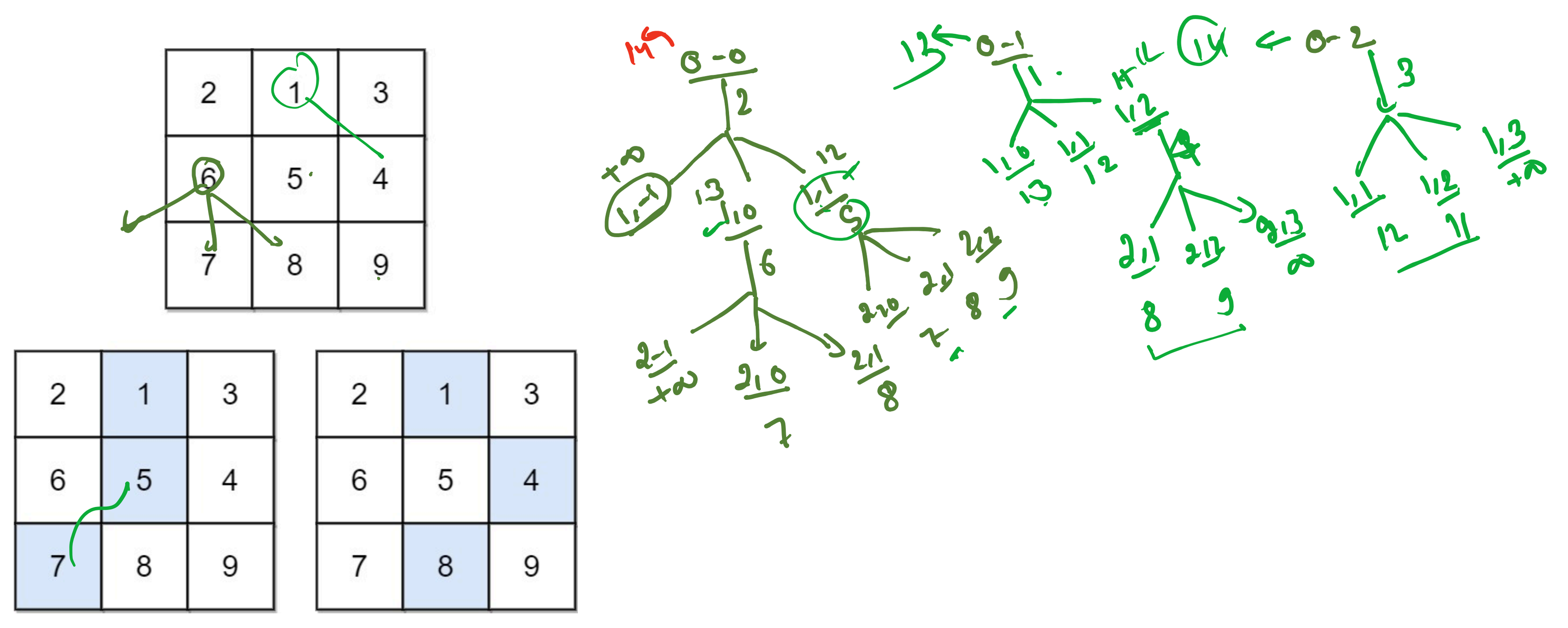




Given an `n x n` integer matrix `grid`, return *the minimum sum of a **falling path with non-zero shifts***.

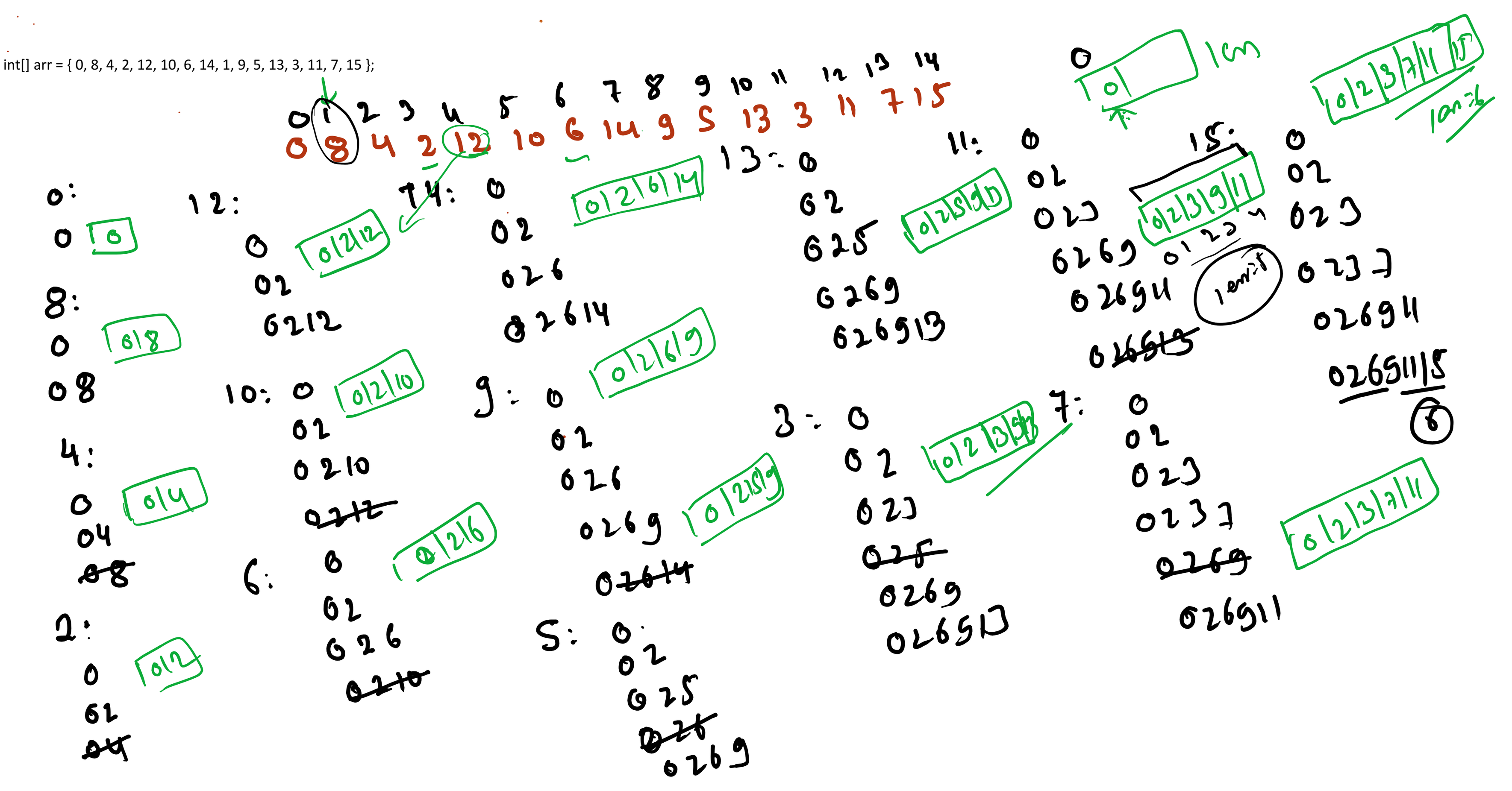
A **falling path with non-zero shifts** is a choice of exactly one element from each row of `grid` such that no two elements chosen in adjacent rows are in the same column.

Example 1:

1	2	3
4	5	6
7	8	9

[0 1 2 3 4 5 6 7 8 9 10 11 14 15 16 17]   0 1 2 3 4 5 6 7

int[] arr = { 0, 8, 4, 2, 12, 10, 6, 14, 1, 9, 5, 13, 3, 11, 7, 15 };



Given *n* wines in a row, with integers denoting the cost of each wine respectively. Each year you can sell the first or the last wine in the row. Let the initial profits from the wines be ***P1, P2, P3…Pn***. In the ***Yth*** year, the profit from the ith wine will be ***Y*P[i].*** The goal is to calculate the maximum profit that can be earned by selling all the wines.

Suppose, wine array denotes the initial cost of each wine in the first year.

wine[] = [2, 3, 5, 1, 4]