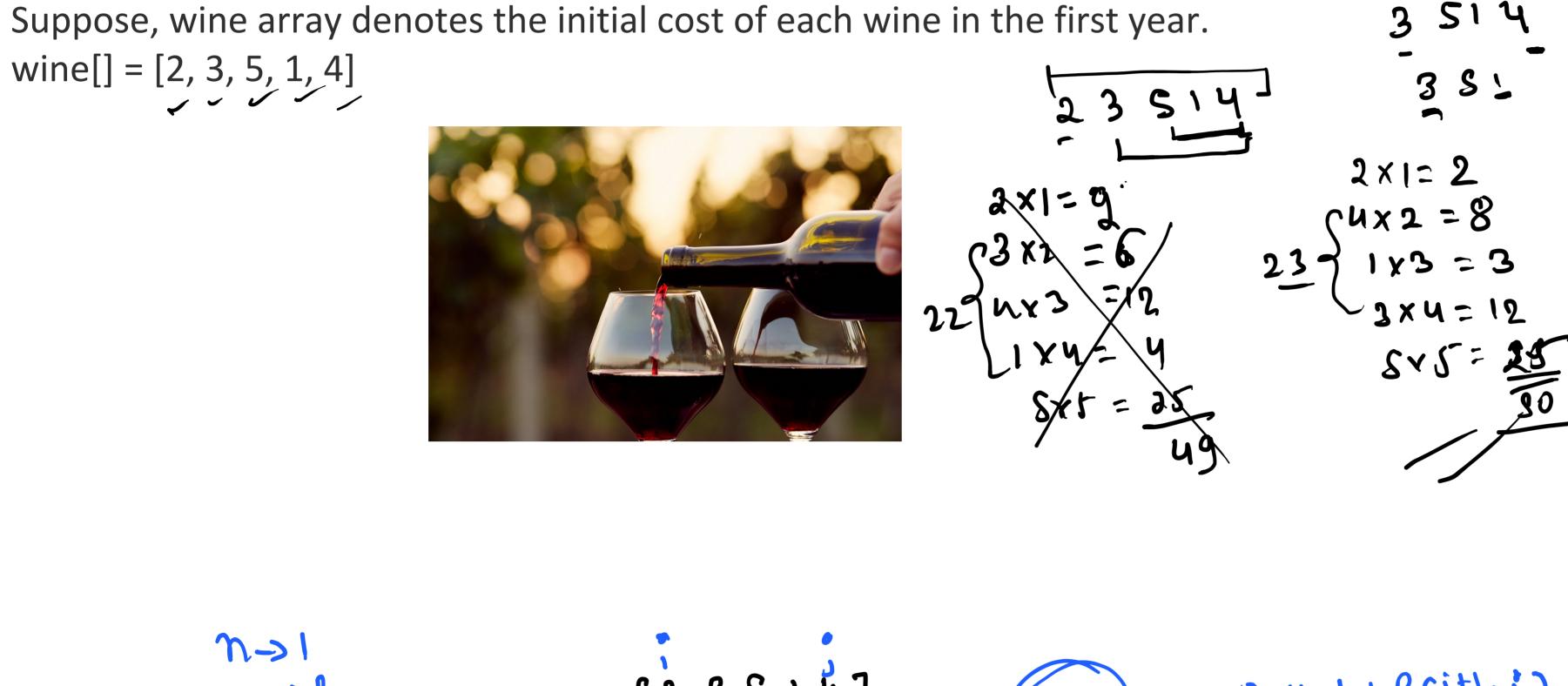
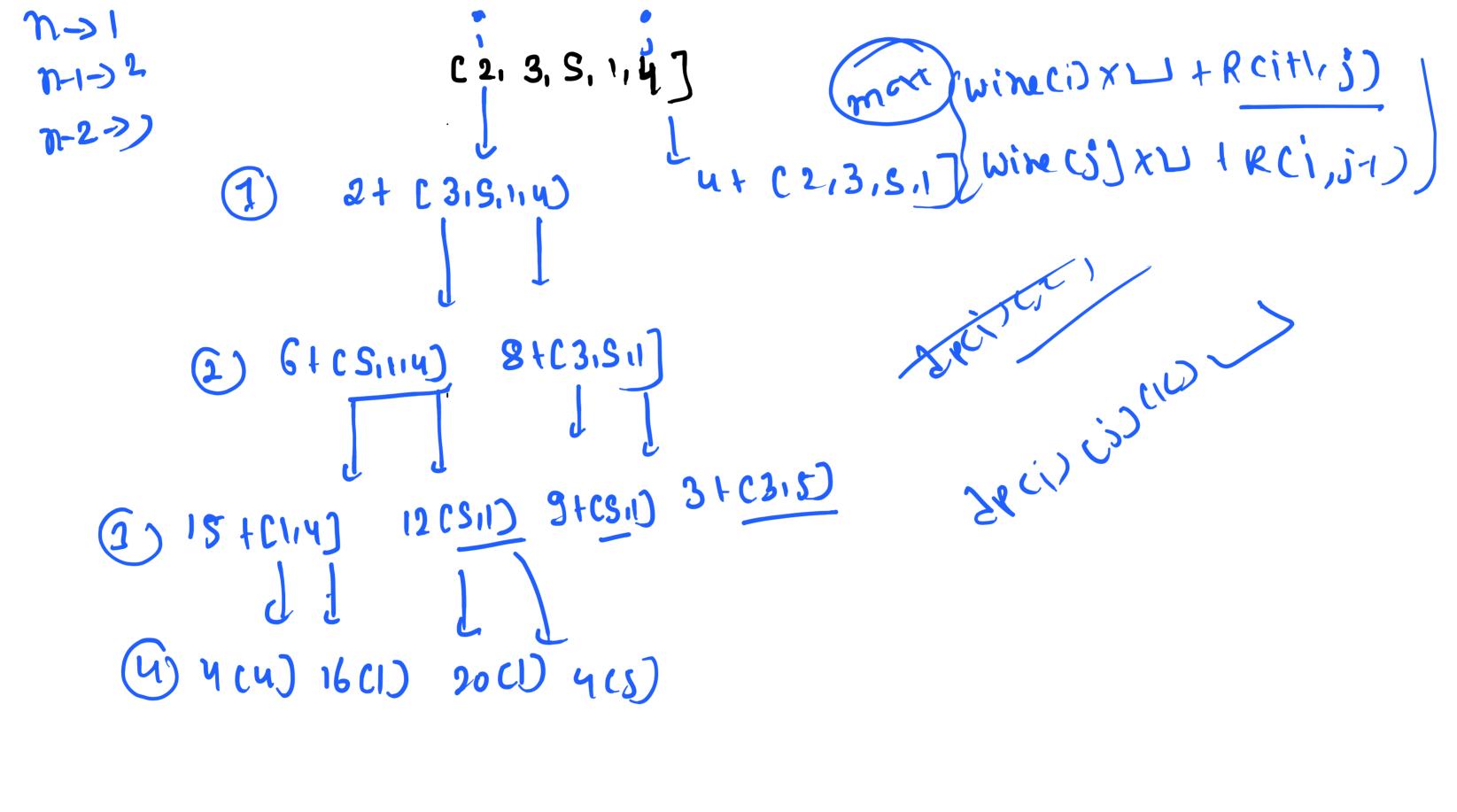
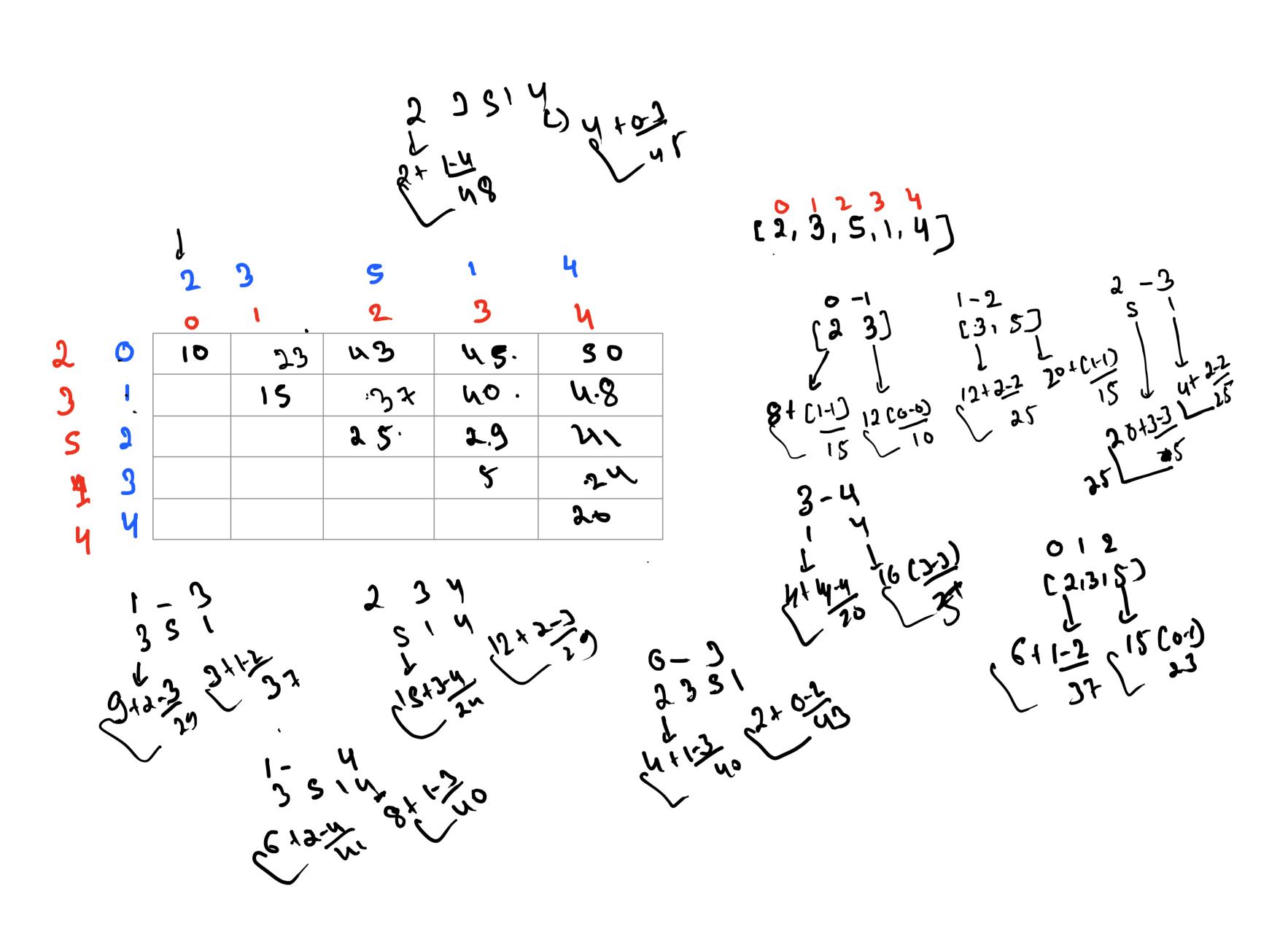


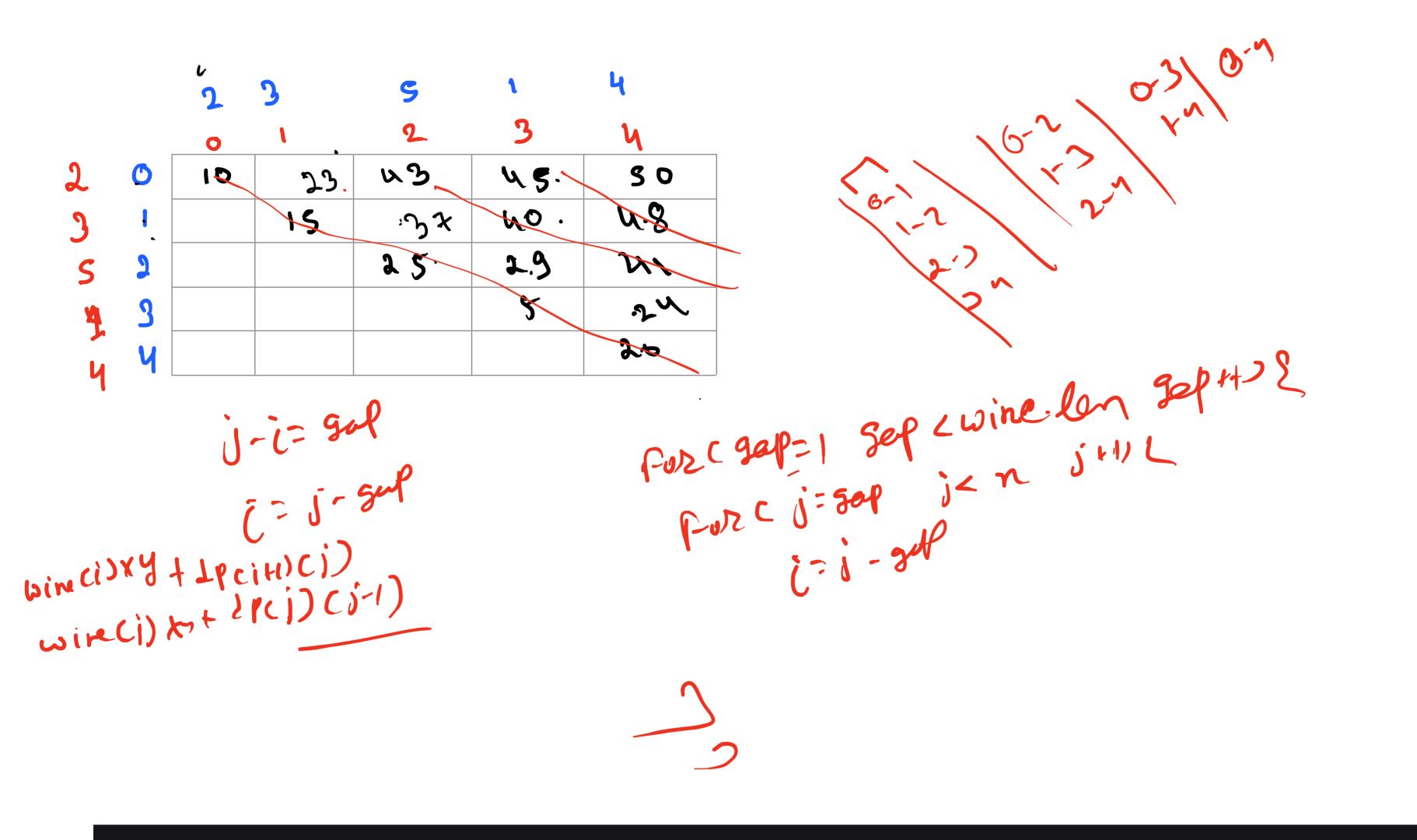
0

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.









It's Valentine's Day in Russia today. as we all know number of girls in Russia is more than number of boys hence boys have an extra advantage while choosing girl for the valentine evening. Each boy has certain number of chocolates and each girl has certain number of candies. Now you being the anchor of evening wants to pair all the boys with girls such that the sum of absolute difference between boy's chocolate and girl's candy in a pair is minimized. Ofcourse some of the girls will remain unpaired but that's okay as we are in Russia

```
public static int Valentine(int[] boys, int[] girls, int i, int j) {
    if (i == boys.length) {
        return 0;
    }
    if (j == girls.length) {
        return 999999;
    }
    int sel = Math.abs(boys[i] - girls[j]) + Valentine(boys, girls, i + 1, j + 1);
    int rej = Valentine(boys, girls, i, j + 1);
    return Math.min(sel, rej);
}
```