Find missing and repeated values

grid = [[9,1,7],[8,9,2],[3,4,6]]

$n = 3$

9	1	7
8	9	2
3	4	6

numbers are in range $[1, n^2]$ → $[1, 3^2]$

→ a ⇒ 2 times

→ b = missing

find a & b
↓ a = 9, b = 5

unordered_set

s.find(grid[i][j]) != s.end()

↓ will give repeated value

$1 \text{ to } n^2 \xrightarrow{sum} \frac{n^2 * (n^2+1)}{2}$

$1 + 2 + 3 + 4 + \underset{b}{\underline{5}} + 6 + 7 + 8 + 9 + \underset{a}{\underline{9}}$

(1 + … + 9: expected sum)

expected sum + a − b = actual sum which exists in

b = exp sum + a − actual sum

exp sum = $\frac{n^2 \times (n^2+1)}{2}$ → $\frac{9 \times 10}{2} = 45$

a = 9

actual sum = 49

b = 5