class Solution {

public:

bool isValidSudoku(vector<vector<char>>& board) {

unordered\_set<char> rows[9], cols[9], boxes[9];

for (int i = 0; i < 9; i++) {

for (int j = 0; j < 9; j++) {

char num = board[i][j];

if (num == '.') continue;

int box\_index = (i / 3) \* 3 + (j / 3); // Get 3×3 box index

// Check if num already exists in row, column, or box

if (rows[i].count(num) || cols[j].count(num) || boxes[box\_index].count(num)) {

return false;

}

// Insert num into row, column, and box sets

rows[i].insert(num);

cols[j].insert(num);

boxes[box\_index].insert(num);

}

}

return true;

}

};