<!DOCTYPE html>﻿<html lang="en">﻿<head>﻿    <meta charset="UTF-8">﻿    <meta name="viewport" content="width=device-width, initial-scale=1.0">﻿    <title>Magic Grid Puzzle</title>﻿    <style>﻿        body {﻿            font-family: Arial, sans-serif;﻿            text-align: center;﻿        }﻿        .grid {﻿            display: grid;﻿            grid-template-columns: repeat(3, 80px);﻿            grid-gap: 5px;﻿            margin: 20px auto;﻿            width: 260px;﻿        }﻿        .cell {﻿            width: 80px;﻿            height: 80px;﻿            display: flex;﻿            align-items: center;﻿            justify-content: center;﻿            font-size: 24px;﻿            background-color: lightblue;﻿            border: 2px solid black;﻿            cursor: pointer;﻿        }﻿        .buttons {﻿            margin-top: 20px;﻿        }﻿        button {﻿            padding: 10px;﻿            font-size: 16px;﻿            margin: 5px;﻿            cursor: pointer;﻿        }﻿    </style>﻿</head>﻿<body>﻿    <h2>Magic Grid Puzzle</h2>﻿    <p>Rearrange the numbers so that every row, column, and diagonal sums to the same number.</p>﻿    <div class="grid" id="grid"></div>﻿    <div class="buttons">﻿        <button onclick="shuffleGrid()">Shuffle</button>﻿        <button onclick="checkSolution()">Check</button>﻿    </div>﻿    <p id="message"></p>﻿    <script>﻿        let correctGrid = [﻿            [8, 1, 6],﻿            [3, 5, 7],﻿            [4, 9, 2]﻿        ];﻿        let currentGrid = [];﻿        function shuffleGrid() {﻿            let numbers = [8, 1, 6, 3, 5, 7, 4, 9, 2];﻿            numbers.sort(() => Math.random() - 0.5);﻿            currentGrid = [];﻿            while (numbers.length) currentGrid.push(numbers.splice(0, 3));﻿            drawGrid();﻿        }﻿        function drawGrid() {﻿            let grid = document.getElementById("grid");﻿            grid.innerHTML = "";﻿            currentGrid.forEach((row, i) => {﻿                row.forEach((num, j) => {﻿                    let cell = document.createElement("div");﻿                    cell.className = "cell";﻿                    cell.innerText = num;﻿                    cell.onclick = () => swapNumbers(i, j);﻿                    grid.appendChild(cell);﻿                });﻿            });﻿        }﻿        function swapNumbers(i, j) {﻿            let emptyCell = findEmptyCell();﻿            if (!emptyCell) return;﻿            let [ei, ej] = emptyCell;﻿            if (Math.abs(i - ei) + Math.abs(j - ej) === 1) {﻿                [currentGrid[i][j], currentGrid[ei][ej]] = [currentGrid[ei][ej], currentGrid[i][j]];﻿                drawGrid();﻿            }﻿        }﻿        function findEmptyCell() {﻿            for (let i = 0; i < 3; i++)﻿                for (let j = 0; j < 3; j++)﻿                    if (currentGrid[i][j] === 5) return [i, j];﻿            return null;﻿        }﻿        function checkSolution() {﻿            let isCorrect = JSON.stringify(currentGrid) === JSON.stringify(correctGrid);﻿            document.getElementById("message").innerText = isCorrect ? "🎉 Correct! You solved it!" : "❌ Not correct! Keep trying.";﻿        }﻿        shuffleGrid();﻿    </script>﻿</body>﻿</html>