Name : Ziya Baris

Surname : Atay

Documentation and Explanation for the C++ Code:

Title: 2D Dynamic Array and Duplicate Count

Purpose: The purpose of this C++ program is to demonstrate the creation of a 2D dynamic array, allow the user to input values into the array, print the array, and then find the number of occurrences of a given target value in the array.

Functions:

**1-int\*\* create(int rows, int cols)**:

* This function takes two integer arguments: **rows** and **cols**, which represent the number of rows and columns, respectively, for the 2D array.
* It dynamically creates a 2D integer array using pointers and returns the pointer to the array.
* Inside this function, it takes user input for each element of the array by iterating through each row and column and reading the values from the user using **cin**.

**2-void print(int\*\* arr, int rows, int cols)**:

* This function takes three arguments: **arr** (the 2D integer array), **rows**, and **cols**.
* It prints the elements of the 2D array in a row-major format, i.e., row by row.

**3-int find(int\*\* arr, int rows, int cols, int target)**:

* This function takes four arguments: **arr** (the 2D integer array), **rows**, **cols**, and **target** (the value to be searched for).
* It searches the 2D array for the given **target** value and returns the count of occurrences of that value in the array.

Main Function:

* The **main()** function is the entry point of the program.
* It starts by prompting the user to input the number of rows and columns they want in the 2D array.
* It then calls the **create()** function to create the 2D dynamic array and takes input from the user for each element of the array.
* After that, it calls the **print()** function to display the elements of the 2D array on the console.
* Next, the user is prompted to enter a target number that they want to find the number of occurrences for.
* The **find()** function is called to find the number of occurrences of the target value in the array.
* The program then prints the result, i.e., the count of occurrences of the target value in the 2D array.

