

1. 請為下列各項完成敘述式：

- a) 將亂數產生之整數陣列 `n[2][2]` 的元素 4 的值乘以 3，並顯示之。
- b) 寫一個迴圈，將亂數產生之整數陣列 `n[10][10]` 的所有元素相加，並將結果儲存到 `total`。
- c) 將一個二維整數陣列 `m[3][3]` 中的 9 個元素均設定初始值為 3。請使用迴圈。
- d) 找出亂數產生之整數二維陣列 `sales[4][5]` 中最大的元素和最小的元素。
- e) 將一個有 100 個元素的陣列 `n1[10][10]` 複製到一個有 200 個元素的陣列 `n2[20][10]`，請從較大陣列的第 100 個位置開始。
- f) 判斷 2 個有 100 個元素的 `double` 二維陣列 `d1[10][10]` 和 `d2[10][10]` 所包含的值之和與差，並將結果儲存到 `double` 的 `sum` 和 `difference`。

2. 一個 `nxm` 二維矩陣可以乘以另一個矩陣 `mxp`，得到一個矩陣，矩陣的元素是第一個矩陣的一列中的元素和第二個矩陣的行相關元素的乘積之和。兩個矩陣都應該是方陣，或者第一個矩陣的行數應該等於第二個矩陣的列數。要計算合成矩陣的每個元素，請將第一個矩陣給定列的第一個元素與第二個矩陣中給定行的第一個元素相乘，將其加到同一列的第二個元素與同一行的第二個元素之乘積，並繼續這樣做，

直到行和列的最後一個元素已被相乘，並加到總和中。請編寫一個程式來計算兩個矩陣的乘積，並將結果儲存在第三個矩陣中。(m, n, p 由使用者輸入)

1. Write statements to accomplish each of the following:
 - a) Multiply the value of element 4 of an integer array `n [2][2]` with 3 and display it.
 - b) Write a loop that adds all the elements of the randomized integer array `n[10][10]` and stores the result in `total`.
 - c) Initialize each of the 9 elements of a two-dimensional integer array `m[3][3]` to 3, using loops.
 - d) Find the largest and smallest element of a randomized integer array `sales[4][5]`.
 - e) Copy a 100-element array `n1[10][10]` into a 200-element array `n2[20][10]`, starting from the 100th position of the larger array.
 - f) Determine and store the sum and difference of the values contained in two, 100-element double arrays `d1[10][10]` and `d2[10][10]`, into double `sum` and `difference`.
2. An two-dimensional matrix can be multiplied by another matrix to give a matrix whose elements are the sum of the products of the elements within a row from the first matrix and the associated elements of a column of the second matrix. Both matrices should either be square matrices, or the number of columns of the first matrix should equal the number of rows of the second matrix. To calculate each element of the resultant matrix, multiply the first element of a given row from the first matrix and the first element of a given column in the second matrix, add that to the product of the second element of the same row and the second element of the same column, and keep doing so until the last elements of the row and column have been multiplied and added to the sum. Write a program to calculate the product of 2 matrices and store the result in a third matrix.(The numbers `m`, `n`, `p`, are given by a user.)