Quiz 4 - Tuesday

6 points

Nov 5, 2024

Name:

Student Number:

Write functions one to allocate and another one to de-allocate a 3D array with the following dimensions:

- `nRows` specifies the number of rows.

- An array `nCols` specifies the number of columns for each row; thus, `nCols[i]` represents the number of columns in the i-th row.

- `nDepth` represents the depth of each cell in the array, defining the third dimension.

Your function should dynamically allocate memory based on these dimensions and **initialize all elements to zero**.

Example 1:

- **Input**: `nRows = 2`, `nCols = [3, 2]`, `nDepth = 4`

- **Explanation**: This will create a 3D array with 2 rows. **Row 1** has 3 columns, each with a depth of 4 layers (depth). **Row 2** has 2 columns, each also with a depth of 4 layers.

IMPORTANT NOTES:

- No need to write `int main()`.