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Data Structures and Algorithms

PDC- Reading Week 3 Systems

Where is memory allocated by malloc()?

The heap.

What does row-major order mean for 2-D arrays? What if you had a 3-D array? What is the offset for a[r][c]?

It means that row 0 and its entirety and followed by row 1 and so on. If you have a 3-D array it would be the same except it would have another parameter that it would have to go through before getting to the next row. The offset would probably be 6.

What the differences between x and y in the following?

X is an array that is statically allocated and y has been dynamically allocated

For a 2D array, array2, are the two elements below in the same or the same column?

They are in the same row.

Where in memory does malloc() allocate space?

The heap?

What is (void \*)?

It is a pointer that can point to any type or unspecified type.

What questions do you have about the reading?

I’d like to go over the output and inputs more. I’ve been having trouble writing them to a file and would like to see what I’ve been doing wrong.