

CP3_Assignment_2_instructions

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CP3 Assignment 2

Matrices

Exercise 1

Construct the following matrices

- A 3x3 matrix with numbers 1 through 9, column 1 should contain (1,2,3)
- A 20x40 matrix with columns populated by a sequence from 600 to 1399 by 1.
- Another 20x40 matrix with columns populated by the sequence of numbers between -1 and 1 that is 800 elements long.

Exercise 2

Create 8 vectors, each 8 integers long where each i^{th} vector at the j^{th} position contains the value $(j*i)$, consider how you might solve this using vectors and a for loop.

Exercise 3

Create the array, `thisArray`, such that the first level contains `largeMatrix` and the second contains `smallMatrix`.

Exercise 4

Construct `showMatrix` that contains the following 3 vectors as its columns: - $c(4,5,6)$ - $c(5,6,4)$ and - $c(6,4,5)$
Then make the matrix `matrixTranspose` by transposing `showMatrix` and the matrix `solveMatrix` by using the `solve()` function on `showMatrix`.