CS 5012: Foundations of Computer Science

Alanna Hazlett uwa6xv 10/16/2024 In class review:

Calculate the 10th number in the Fibonacci sequence using memoization.

Compute the Longest Common String (LCS) between LEAR and EARN

	j	0	1	2	3	4	
i			E	Α	R	N	
0							
1	L						
2	E						
3	Α						
4	R						

In class group assignment:

Compute the Longest Common String (LCS) between ALGORITHM and ALIGNMENT

	j	0	1	2	3	4	5	6	7	8	9
i			Α	L	I	G	N	М	E	N	Т
0		0	0	0	0	0	0	0	0	0	0
1	Α	0	1	1	1	1	1	1	1	1	1
2	L	0	^1	D2	<2	<2	<2	<2	<2	<2	<2
3	G	0	^1	^2	^2	D3	<3	<3	<3	<3	<3
4	0	0	^1	^2	^2	^3	^3	^3	^3	^3	^3
5	R	0	^1	^2	^2	^3	^3	^3	^3	^3	^3
6	I	0	^1	^2	D3	^3	^3	^3	^3	^3	^3
7	T	0	^1	^2	^3	^3	^3	^3	^3	^3	D4
8	Н	0	^1	^2	^3	^3	^3	^3	^3	^3	^4
9	М	0	^1	^2	^3	^3	^3	D4	<4	<4	^4