

Homework

due Wednesday, April 7, 2020

Submit via dropbox on D2L

- (1) Find the best way to multiply the matrices $ABCDE$ with sizes $A 4 \times 6$, $B 6 \times 7$, $C 7 \times 8$, $D 8 \times 5$, and $E 5 \times 10$.
- (2) Given the following tableau already filled in, find the best selection of the following items: A with weight 2 and value 4, B with weight 3 and value 5, C with weight 4 and value 9, D with weight 5 and value 13, E with weight 6 and value 16, F with weight 7 and value 19, and G with weight 8 and value 20. The capacity is 17.

	/	A	B	C	D	E	F	G
0 :	0	0	0	0	0	0	0	0
1 :	0	0	0	0	0	0	0	0
2 :	0	4	4	4	4	4	4	4
3 :	0	4	5	5	5	5	5	5
4 :	0	4	5	9	9	9	9	9
5 :	0	4	9	9	13	13	13	13
6 :	0	4	9	13	13	16	16	16
7 :	0	4	9	14	17	17	19	19
8 :	0	4	9	14	18	20	20	20
9 :	0	4	9	18	22	22	23	23
10 :	0	4	9	18	22	25	25	25
11 :	0	4	9	18	26	29	29	29
12 :	0	4	9	18	27	29	32	32
13 :	0	4	9	18	27	33	35	35
14 :	0	4	9	18	31	34	36	36
15 :	0	4	9	18	31	38	39	39
16 :	0	4	9	18	31	38	41	41
17 :	0	4	9	18	31	42	44	44

- (3) Find the edit (Levenshtein) distance between "ATTGCCAA" and "ACGTTAAC"