4/26/2021 Clusters.Top



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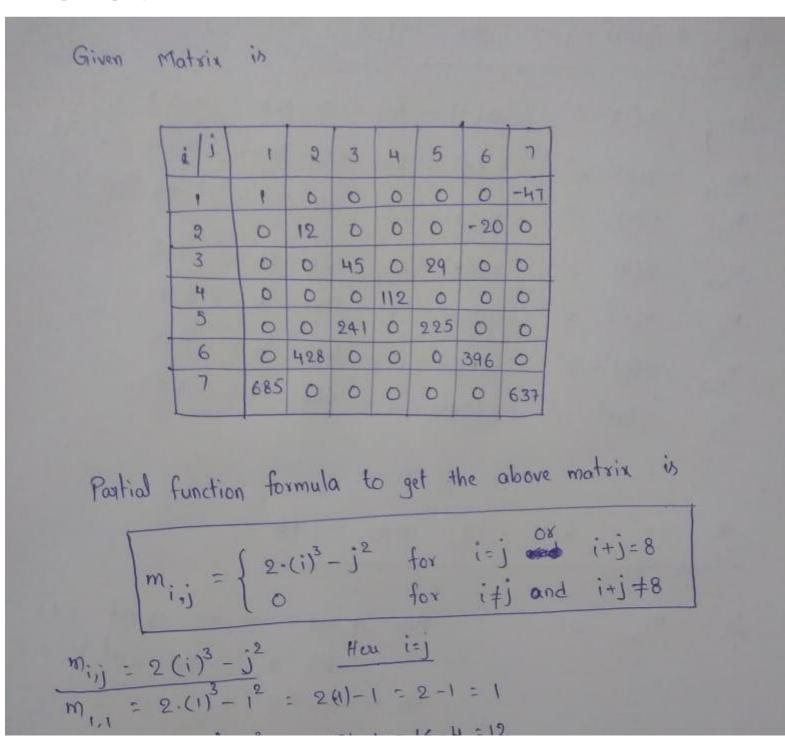
Question:

i /j	1	2	3	4	5	6	7
1	1	0	0	0	0	0	-47
2	0	12	0	0	0	-20	0
3	0	0	45	0	29	0	0
4	0	0	0	112	0	0	0
5	0	0	241	0	225	0	0
6	0	428	0	0	0	396	0
7	685	0	0	0	0	0	637

Given is the above matrix m. In order to represent m most efficiently (allocating minimum amount of memory space)) provide a partial function formula (NOT code!!!) in terms of i and j. You can use the partial function formula I provided for you below.

$$m_{i,j} = \begin{cases} for \\ for \end{cases}$$

Answer:



$$m_{2,2} = 2 \cdot (2)^{3} - 2^{2} = 2(8) - 4 = (6 - 4)$$

$$m_{3,3} = 2 \cdot (3)^{3} - 3^{2} = 2(27) - 9 = 54 - 9 = 45$$

$$m_{4,4} = 2 \cdot (4)^{3} - 4^{2} = 2(64) - 16 = 128 - 16 = 112$$

$$m_{4,4} = 2 \cdot (5)^{3} - 5^{2} = 2(125) - 25 = 250 - 25 = 225$$

$$m_{5,5} = 2 \cdot (5)^{3} - 6^{2} = 2(216) - 36 = 432 - 36 = 396$$

$$m_{6,6} = 2 \cdot (6)^{3} - 6^{2} = 2(216) - 36 = 432 - 36 = 396$$

$$m_{7,7} = 2 \cdot (7)^{3} - 7^{2} = 2(343) - 49 = 686 - 49 = 637$$

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						Automy bulling		
	m.	= 0	fox	i + j	and i+j ‡8			
	En:	m 243	-0		Here 2 and 3 2+3=5	are not equal 2 # 3 :. Not equal to 8		
					The corresponding	m _{2,3} =0		