

$A[1..4]$   
 $10 \times 20 \times 5 \times 10 \times 8$

$A_1 \sim A_4$

1. Costo total

2. Forma de dividir los parentesis

$$m[i,j]: \begin{cases} 0 & \text{si } i=j \\ \min_{i \leq k < j} \{m[i,k] + m[k+1,j] + p_{i-1}p_kp_j\} & \text{si } i < j \end{cases}$$

$(A_1 | A_2) (A_3 | A_4)$

1	2	3	4
1	0	1000	1500
2		0	1000
3			0
4			0

Handwritten notes on the left:  
 $MC_{1,4}$   
 $MC_{1,2}$   
 $MC_{3,4}$   
 $MC_{2,3}$   
 $MC_{1,3}$   
 $MC_{2,4}$

$$M[1,2] = M[1,1] + M[2,2] + p_0 p_1 p_2$$

$$M[2,3] = M[2,2] + M[3,3] + p_1 p_2 p_3$$

$$M[3,4] = M[3,3] + M[4,4] + p_2 p_3 p_4$$

$$M[1,3] = \begin{cases} M[1,1] + M[2,3] + p_0 p_1 p_3 \\ M[1,2] + M[3,3] + p_0 p_2 p_3 \end{cases}$$

$$M[2,4] = \begin{cases} M[2,2] + M[3,4] + p_1 p_2 p_4 \\ M[2,3] + M[4,4] + p_1 p_3 p_4 \end{cases}$$

$$M[1,4] = \begin{cases} M[1,1] + M[2,4] + p_0 p_1 p_4 \\ M[1,2] + M[3,4] + p_0 p_2 p_4 \\ M[1,3] + M[4,4] + p_0 p_3 p_4 \end{cases}$$

$$M[1,2] + M[3,4] + p_0 p_2 p_4 = 1000 + 400 + 400 = 1800$$

$$M[2,3] + M[4,4] + p_1 p_3 p_4 = 1000 + 0 + 800 = 1800$$