Nombre:

Tema: 15 de marzo 2022

Día	Mes	Año	Folio

Actividad 2.4 - OBST

i\j	0	1	2	3	4
1	0	0.14			
2	x	0	0.06		
3	x	x	0	0.6	
4	x	x	x	0	0.2
5	x	x	x	x	0

$c(1,2) = \min_{i \le k \le j} \{c(i,k-1) + c(k+1,j)\}$

$1 \le k \le 2$; $k = 1$

$c(1,0) + c(2,2) = 0 + 0.06 = 0.06$ ← Menor

$k = 2$

$c(1,1) + c(2,2) = 0.14 + 0 = 0.14$

el menor es 0.06

$= 0.06 + 0.14 + 0.06 = 0.26$

- $c(2,3) = \min_{i \le k \le j} \{c(i,k-1) + c(k+1,j)\} + \sum_{i=1}^{j} p(a_i)$

  $2 \le k \le 3$

  $k = 2$

- $c(2,1) + c(3,3) = 0 + 0.6 = 0.6$

  $k = 3$; $c(2,2) + c(4,3) = 0.06 + 0 = 0.06$

  $= 0.06 + (0.6 + 0.06) = 0.72$

- $c(3,4) = \min_{i \le k \le j} \{c(i,k-1) + c(k+1,j)\} + \sum$

  $3 \le k \le 4$; $k = 3$

  $c(3,2) + c(4,4) = 0 + 0.2 = 0.2$ ← Menor

  $k = 4$ $c(3,3) + c(5,4) = 0.6 = 0.6$

  el menor es 0.2. $0.02 + \sum_{s=3}^{4}$; $0.02 + (0.6 + 0.2 = 1$

- $c(1,3) = \min_{i \le k \le j} \{c(i,k-1) + c(k+1,j)\} + \sum$

  $1 \le k \le 3$, $k = 1$. $c(1,0) + c(2,3) = 0 + 0.72 = 0.72$

  $k = 2$; $c(1,1) + c(3,3) = 0.14 + 0.6 = 0.74$

  $k = 3$. $c(1,2) + c(4,3) = 0.26 + 0 = 0.26$ ← Menor

  $= 0.26 + (0.14 + 0.06 + 0.6) = 1.06$

- $c(2,4) = \min_{i \le k \le j} \{c(i,k-1) + c(k+1,j)\} + \sum$

  $2 \le k \le 4$. $k = 2 \rightarrow c(2,1) + c(3,4) = 0 + 1 = 1$

  $k = 3$; $c(2,2) + c(4,4) = 0.06 + 0.2 = 0.26$ ← Menor

  $k = 4$; $c(2,3) + c(5,4) = 0.72 + 0 = 0.72$

  $0.26 + \sum_{s=2}^{4} p(a_i) = 0.26 + (0.06 + 0.6 + 0.2) = 1.12$

Nombre:
Tema:

Día | Mes | Año | Folio

$c(1,4) = \min_{i<k<j} \{ c(1,k-1) + c(k+1,j) \} + \sum_{i<k<j}$

$k=1$; $c(1,0) + c(2,4) = 0 + 1.12 = 1.12$

$k=2$; $c(1,1) + c(3,4) = 0.14 + 1 = 1.14$

$k=3$; $c(1,2) + c(4,4) = 0.26 + 0.2 = 0.46$

$k=4$; $c(1,3) + c(5,4) = 1.06 + 0 = 1.06$

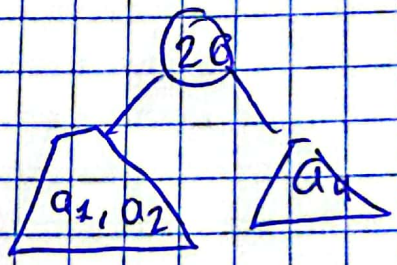
$0.46 + \sum = 0.46 + 1 = 1.46$

Rendo una tabla así:

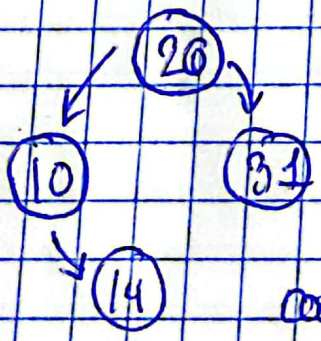
i/j	0	1	2	3	4
1	0	0.14	0.26	1.06	1.46
2	x	0	0.06	0.72	1.12
3	x	x	0	0	1
4	x	x	x	0	0.2
5	x	x	xx		0

Se obtiene que el menor promedio de comparaciones de $i=4$ a $j=4$ $c(1,4) = 1.46$ se da con $k=3$

Por lo tanto



Con lo anterior, el árbol sería:



costo total de 1.46