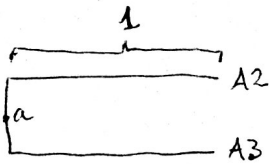


we have the next matrix of pairwise distances:

	A1	A2	A3	A4	A5	A6
A1	0	8.25	6.32	8.25	8.06	10.05
A2		0	2.0	8.49	6.40	10.63
A3			0	7.21	5.39	9.43
A4				0	2.24	2.24
A5					0	4.24
A6						0

We combine A2 and A3: $2.0/2 = 1$



Recalculation of matrix:

$$d(A1, A2UA3) = \frac{8.25 + 6.32}{2} = 7.285$$

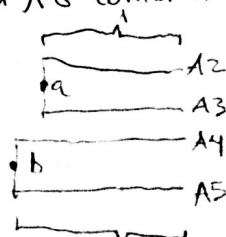
$$d(A4, A2UA3) = \frac{8.49 + 7.21}{2} = 7.85$$

$$d(A5, A2UA3) = \frac{6.40 + 5.39}{2} = 5.895$$

$$d(A6, A2UA3) = \frac{10.63 + 9.43}{2} = 10.03$$

	A1	A2UA3	A4	A5	A6
A1	0	7.285	8.25	8.06	10.05
A2UA3		0	7.85	5.895	10.03
A4			0	2.24	2.24
A5				0	4.24
A6					0

We combine A4 and A5 (A4 and A6 combination is possible too) $2.24/2 = 1.12$



Recalculation of matrix:

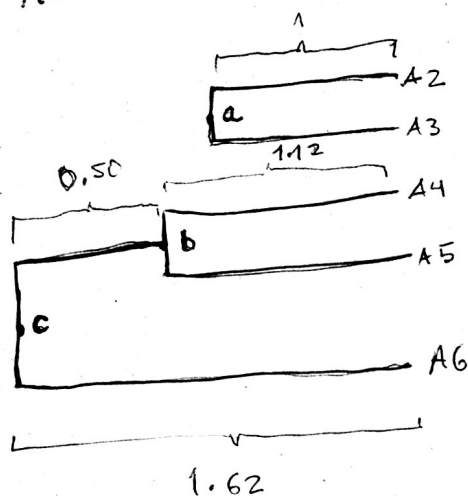
	A1	A2 U A3	A4 U A5	A6
A1	0	7.285	8.155	10.05
A2 U A3		0	6.87	10.03
A4 U A5			0	3.24
A6				0

$$d(A6, A4 U A5) = \frac{2.24 + 4.24}{2} = 3.24$$

$$d(A1, A4 U A5) = \frac{8.25 + 8.06}{2} = 8.155$$

$$d(A4 U A5, A2 U A3) = \frac{8.19 + 7.21 + 6.40 + 5.37}{4} = 6.87$$

we combine A6 and A4 U A5 : 1.62



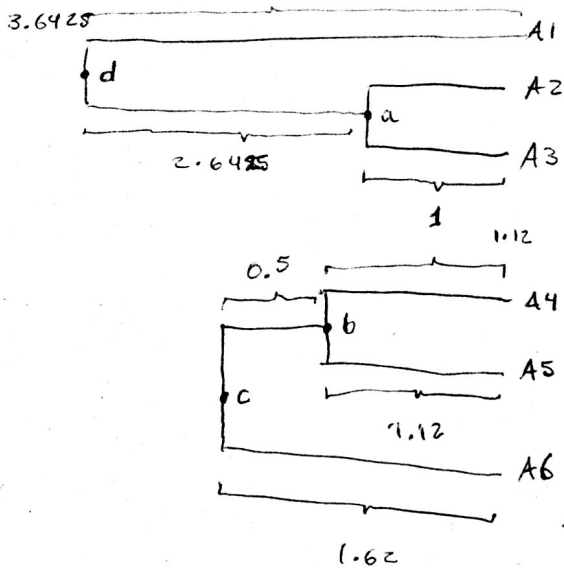
Recalculation of matrix:

	A1	A2 U A3	A4 U A5 U A6
A1	0	7.285	8.786
A2 U A3		0	7.925
A4 U A5 U A6			0

$$d(A1, A4 U A5 U A6) = \frac{8.25 + 8.06 + 10.05}{3} = 8.786$$

$$d(A2 U A3, A4 U A5 U A6) = \frac{8.49 + 6.40 + 10.63 + 7.21 + 5.89 + 9.43}{6} = 7.925$$

We combine $A2UA3$ and $A1$: $7.285/2 = 3.6425$



Recalculation of matrix:

	$A1UA2UA3$	$A4UA5UA6$
$A1UA2UA3$	0	8.2122
$A4UA5UA6$		0

$$d(A1UA2UA3, A4UA5UA6) = 8.25 + 8.06 + 10.05 + 8.49 + 6.40 + 10.63 + 7.21 + 5.39 + 9.43$$

$$= 8.2122$$

Final union of branches: $8.2122 / 2 = 4.1061$

