* Agglomerative Hirearchical clustering :-

	X	Y
P1	0.40	0.53
P2	0.22	0.38
P3	0.35	0.32
P4	0.26	0.19
P5	0.08	0.41
P6	0.45	0.30

Distance [(x, y), (a, b)] = $\sqrt{(x-a)^2 + (y-b)^2}$

ED = P1 & P2

(0.40, 0.53) & (0.22, 0.38)

$= \sqrt{(0.40 - 0.22)^2 + (0.53 - 0.38)^2}$

$= 0.23$

	P1	P2	P3	P4	P5	P6
P1	0					
P2	0.23	0				
P3	0.22	0.15	0			
P4	0.37	0.20	0.15	0		
P5	0.34	0.14	0.28	0.29	0	
P6	0.23	0.25	0.11	0.22	0.39	0

To update the distance matrix MIN [dist (P3, P6), P5]

MIN (dist (P3, P4), (P6, P4))

MIN [(0.15, 0.22)]

0.15

To update the distance matrix MIN [dist (P3, P6), P5]

MIN (dist (P3, P5), (P6, P5))

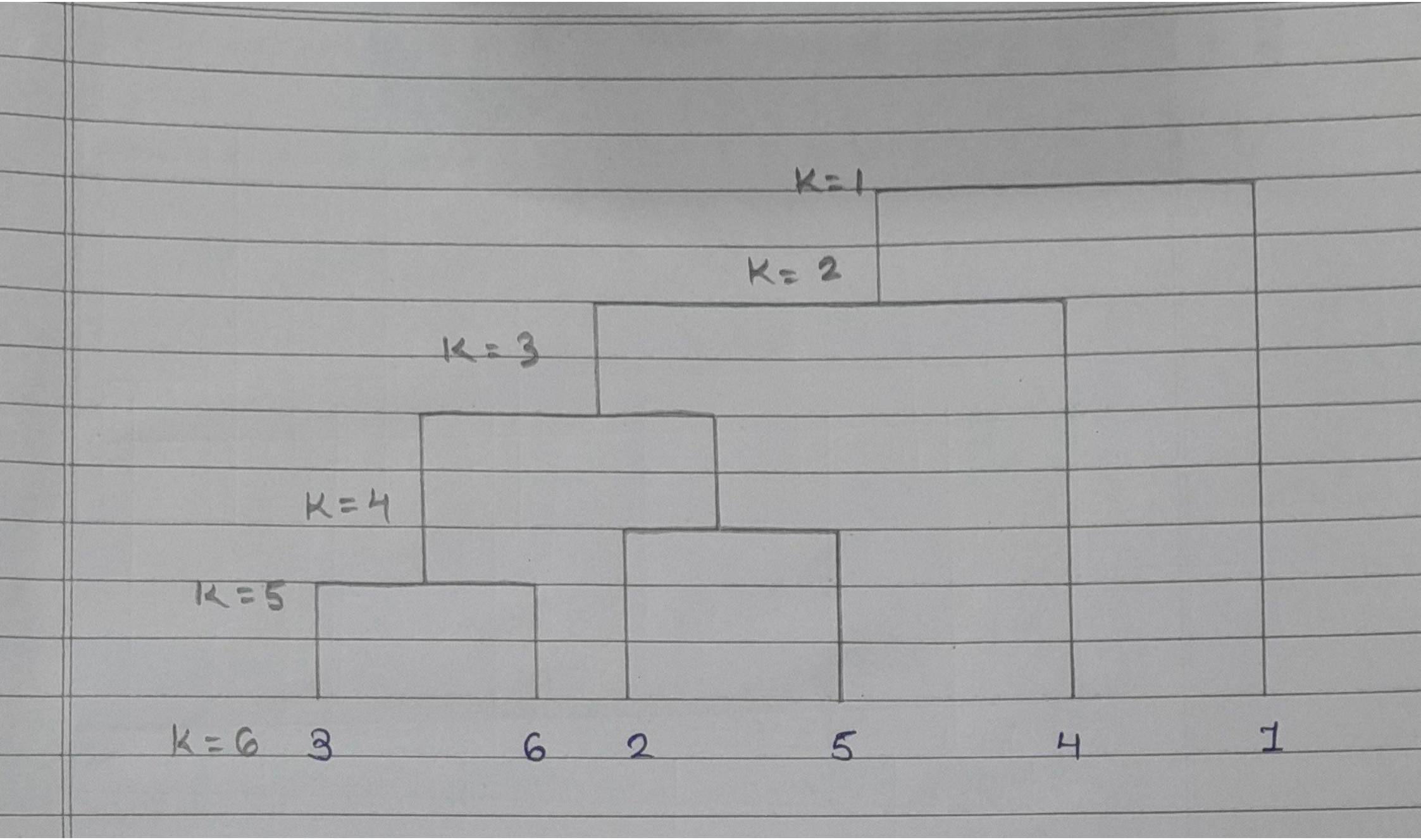
MIN [(0.28, 0.39)]

0.28

	P1	P2	P3, P6	P4	P5
P1	0				
P2	0.23	0			
P3, P6	0.22	0.15	0		
P4	0.37	0.20	0.15	0	
P5	0.34	0.14	0.28	0.29	0

	P1	P2, P5	P3, P6	P4
P1	0			
P2, P5	0.23	0		
P3, P6	0.22	0.15	0	
P4	0.37	0.20	0.15	0

	P1	P2, P5, P3, P6, P4
P1	0	
P2, P5, P3, P6, P4	0.22	0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K=2
K=3
K=4
K=5
K=6
3
6
2
5
4
1