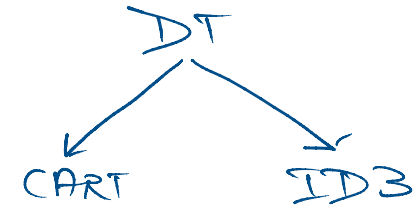
Hierarchical Clustering

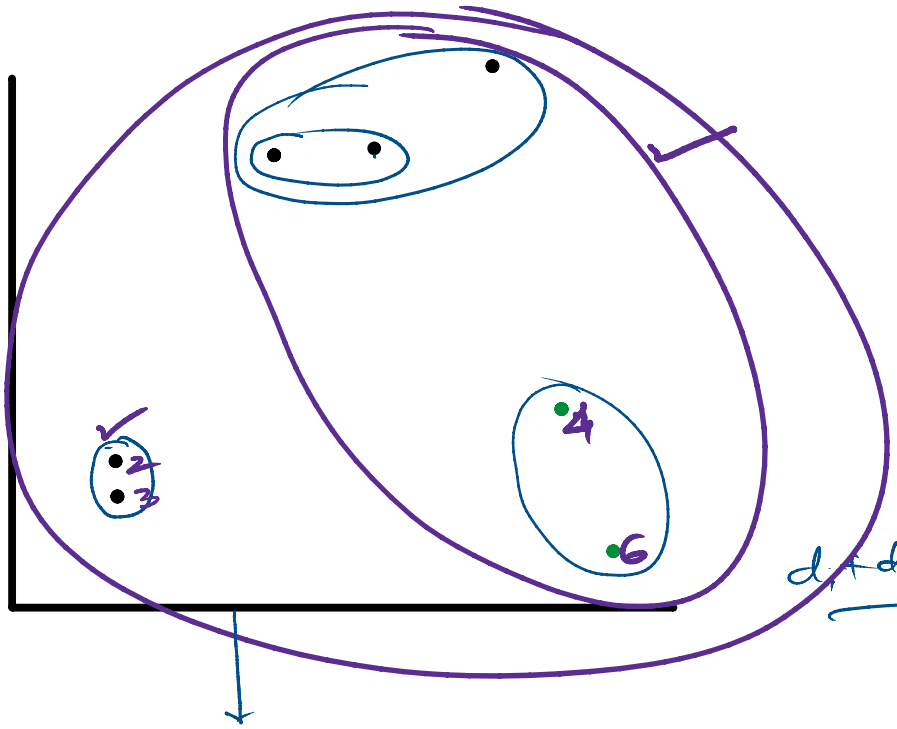
14 September 2024 19:45

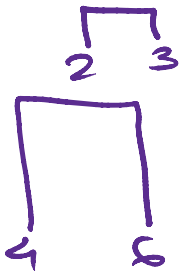


① Agglomerative ✓

② Divisive

x = 6 input data.





After doing this process step by step, we represent the combining of datapoints and groups as a diagram and that diagram is called as 'Dendrograms'.

	2	6	9	11	3
2	0	4	7	9	1
6	4	0	3	5	3
9	7	3	0	2	6
11	9	5	2	0	8
3	1	3	6	8	0

↓

4 Complete

single

↓

4 Complete

	2,3	6	9	11
2,3	0	4	7	9
6	4	0	3	5
9	7	3	0	2
11	9	5	2	0

(2,3) → 6

2 → 6 &

3 → 6

↓ min

$\frac{4+3}{2} = 3.5$

↓

	2,3	6	9,11
2,3	0	4	9
6	4	0	5
9,11	9	5	0

(2,3) → (9,11)

2,3 → 9 &

2,3 → 11

↓

	((2,3),6)	(9,11)
((2,3),6)	0	9
(9,11)	9	0

((2,3),6) → (9,11)

2,3 → 9,11 →

6 → 9,11

6 → 9, 11

(2, 3), 6) → (9, 11)