Step-3:- Find the distance for cluster {a, b, c, d, e} using average linkage.

$$d(\{a,c,e\},\{b,d\}) = \frac{d(a,b)+d(a,d)+d(c,b)+d(c,d)+d(e,b)+d(e,d)}{3\times 2}$$

$$= \frac{9+6+10+9+10+8}{6} = \frac{49}{6} = 8.16$$

	ace	bd
ace	0	*8.16
bd	*8.16	0

Iteration – 4 :-

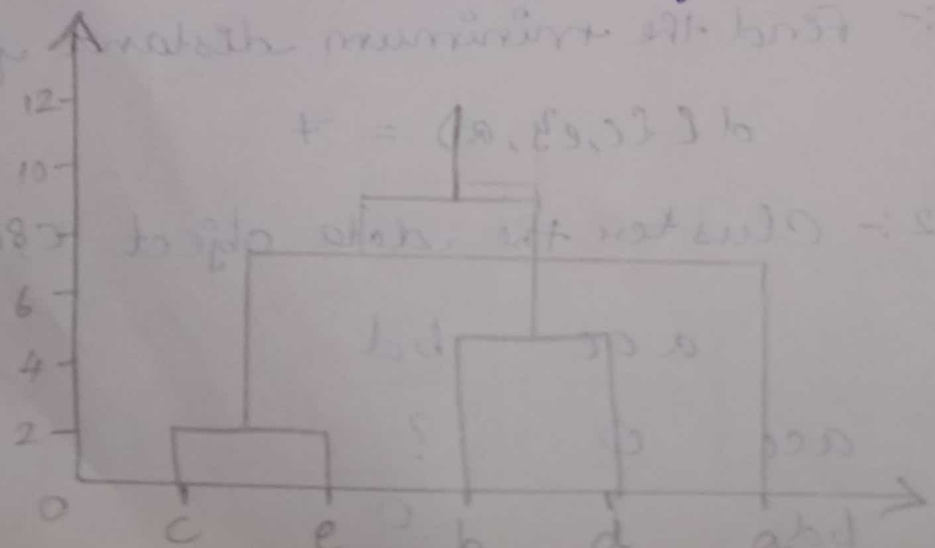
Step-1:- Find the minimum distance from the above table.

$$d(abcde) = 8.16$$

Step-2:- Cluster the data object a, b, c, d, e.

	abcde
abcde	8.16

Step-3:- Final dendrogram.



Step - 3:- Find the distance for cluster {a, b, c, d, e} using average linkage.

$$d(\{a,c,e\}, \{b,d\}) = \frac{d(a,b) + d(a,d) + d(c,b) + d(c,d) + d(e,b) + d(e,d)}{3 \times 2}$$

$$= \frac{9 + 6 + 10 + 9 + 10 + 8}{6} = \frac{49}{6} = 8.16$$

	ace	bd
ace	0	*8.16
bd	*8.16	0

Iteration – 4 :-

Step-1:- Find the minimum distance from the above table.

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Step-2 :- Cluster the data object a, b, c, d, e.

	abcde
abcde	8.16

Step-3 :- Final dendrogram.