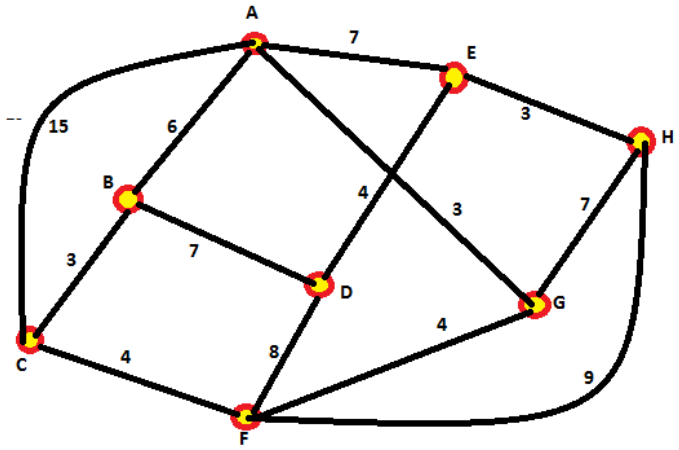
Question: In the given network find the shortest distance from node A to node H using Dijkstra algorithm / OSPF



	Node A	Node B	Node C	Node D	Node E	Node F	Node G	Node H	Remarks
A	0	6(A,B)	15(A,C)	∞	7(A,E)	∞	3(A,G)	∞	∞ means not directly connected, choose the smallest value i.e. Node G
G	-	6(A,B)	15(A,C)	∞	7(A,E)	3+4(A,G,F)	-	3+7(A,G,H)	Previous lowest value is to be added
B	-	-	6+3(A,b,C)	6+7(A.B,D)	7(A,E)	7(A,G,F)	-	10(A,G,H)	
E	-	-	9(A,B,C)	7+4(A,E,D)	-	7(A,G,F)	-	10(A,G,H)	We can change H value to 10(A,E,H)
F	-	-	9(A,B,C)	11(A,E,D)	-	-	-	10(A,G,H)	
C	-	-	-	11(A,E,D)	-	-	-	10(A,G,H)	

We have shortest path A to G to H with value 10

We can also have alternate path A to E to H with value 10

	Node A	Node B	Node C	Node D	Node E	Node F	Node G	Node H	Remarks
A	0	6(A,B)	15(A,C)	∞	7(A,E)	∞	3(A,G)	∞	∞ means not directly connected, choose the smallest value i.e. Node G
G	-	6(A,B)	15(A,C)	∞	7(A,E)	3+4(A,G,F)	-	3+7(A,G,H)	Previous lowest value is to be added
B	-	-	6+3(A,b,C)	6+7(A.B,D)	7(A,E)	7(A,G,F)	-	10(A,G,H)	
E	-	-	9(A,B,C)	7+4(A,E,D)	-	7(A,G,F)	-	10(A,G,H)	We can change H value to 10(A,E,H)
F	-	-	9(A,B,C)	11(A,E,D)	-	-	-	10(A,G,H)	
C	-	-	-	11(A,E,D)	-	-	-	10(A,G,H)	