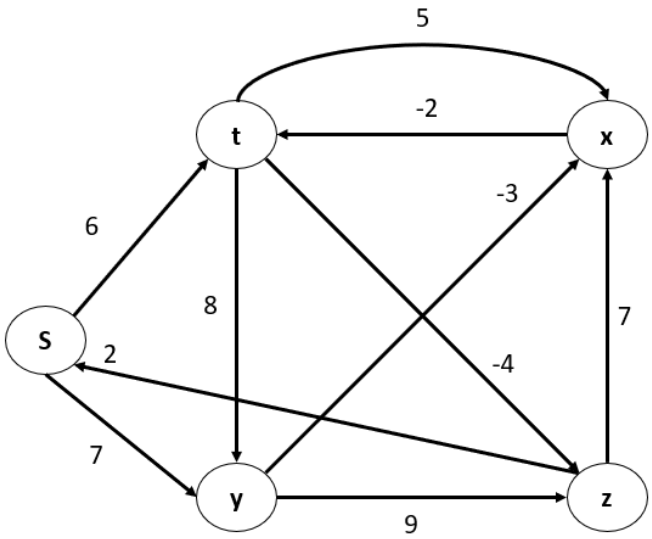
Bellman Ford Algorithm

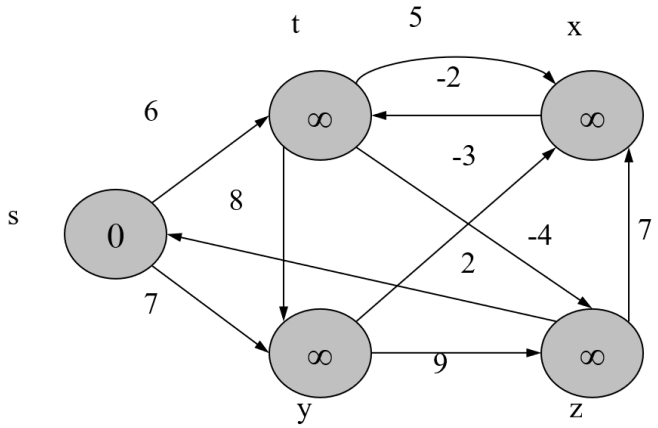
➔ Deals with negative edges.

Example:



Source Vertex: S

Solution:



Here, total vertex = 5

So, iteration needed = 5 – 1 = 4

Visited Vertex	s	t	y	x	z	
Initially	0	∞	∞	∞	∞	
s	0	6	7	∞	∞	1st Iteration
t	0	6	7	11	2	
y	0	6	7	4	2	
x	0	2	7	4	2	
z	0	2	7	4	2	

s	0	2	7	4	2	2nd Iteration
t	0	2	7	4	-2	
y	0	2	7	4	-2	
x	0	2	7	4	-2	
z	0	2	7	4	-2	
s	0	2	7	4	-2	3rd Iteration
t	0	2	7	4	-2	
y	0	2	7	4	-2	
x	0	2	7	4	-2	
z	0	2	7	4	-2	

4th iteration is not needed, because the latest values of 2nd and 3rd iterations are same.

So, Final Graph: