

## Time Complexity (Bellman-Jord Algo.)

→ If  $|V| \rightarrow$  no. of vertices  
 $|E| \rightarrow$  no. of edges.

Relaxation will take  $|V|$  no. of times over no. of edges  
i.e.  $|E|$ .

$$\therefore \text{Time Complexity} = O(V \cdot E) \\ \Rightarrow O(|V| \cdot |E|)$$

→ If we have  $n$  no. of vertices and edges  
i.e.  $|V| = |E| = n$ .

$$\therefore \text{Time Complexity } (O(n^2))$$