

CA

## Distance vector algorithm

```
class Graph:
```

```
    def __init__(self, vertices):  
        self.v = vertices  
        self.graph = []
```

```
    def add_edge(self, s, d, w):  
        self.graph.append([s, d, w])
```

```
    def print_solution(self, dist, src, next_hop):  
        print("Routing table for ", src)  
        print("Dest\t\t cost\t\t Next Hop")  
        for i in range(self.v):  
            print("{0}\t\t {1}\t\t {2}".  
                  format(i, dist[i], next_hop[i]))
```

```
    def bellman_ford(self, src):
```

```
        dist = [999] * self.v
```

```
        dist[src] = 0
```

```
        next_hop = [src] * self.v
```