

Class Graph:

```
def __init__(self, n):
```

```
    self.matrix = []
```

```
    self.n = n
```

```
def addEdge(self, u, v, w):
```

```
    self.matrix.append((u, v, w))
```

```
def printArr(self, dist, src):
```

```
    print("vector Table of ", format(chr(ord('A') + src)))
```

```
    for i in range(self.n):
```

```
        print("{} | {}".format(chr(ord('A') + i), dist[i]))
```

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

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

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

```
for _ in range(self.n - 1):
```

```
    for u, v, w in self.matrix:
```

```
        if dist[u] != 999 and dist[u] + w < dist[v]:
```

```
            dist[v] = dist[u] + w
```

```
self.printArr(dist, src)
```