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CN lab

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1BM18CS023

Write a program for distance vector algorithm to find suitable path for transmission (Python)

```
class node():
    dist[20]
    from[20]

def start():
    dm[20][20]
    print("Enter the number of nodes")
    no = input()
    print("Enter the distance matrix:")
    for i in range(no):
        for j in range(no):
            dm[i][j] = input()
            dm[i][i] = 0
            route[i].dist[i] = dm[i][j]
            route[i].from[j] = j
```

BP

```
flag = 1
while(flag):
    flag = 0
    for i in range(no):
        for j in range(no):
            for k in range(no):
                if ([rout[i].dist[j]) > (route[i].dist[k] +
                                         route[k].dist[j])):

                    route[i].dist[j] = route[i].dist[k] +
                                       route[k].dist[j]

                    route[i].from[j] = k
                    flag = 1

~~for(int i=0~~
for i in range(no):
    print("Router info for router" + " " + i+1)
    print("Dest    Next Hop    Dist")
    for j in range(no):
        Print(j+1+" "+route[i].from[j]+1+" "+route[i].
                                           dist[j]
```