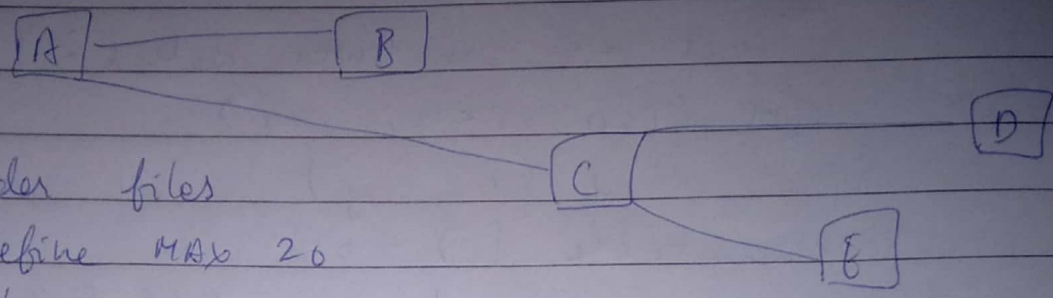
CN - LAB - 7

1BM18CS0
REVANTH
@network

Distance vector Algorithm




```
header files
# define MAX 20
int n
class router
{   char adj_new [MAX], adj_old [MAX];
int new_table [MAX], old_table [MAX];
public:
        router ()
{   for (int i=0; i<MAX; i++)
    ~~table~~ ~~old[i] = new_table~~
    old_table [i] = new_table [i] = 99; }
void copy ()
{   for (i=0; i<n; i++)
    {   adj_old [i] = adj_new [i];
        old_table [i] = new_table [i];
    } }
int same ()
{   for (int i=0; i<n; i++)
    if (old_table [i] != new_table [j])
        return 0;
        return 1;
    }
void input (int j)
{   cout << " Enter 1 if the router is
        adjacent to router " << (char)
    ('A' + j) << " else enter 99 : " <<
```

```
for (i=0; i<n; i++)
    if (i!=j)
    cout << (char) (A+i) << " ";
    cout << "\n Enter matrix:";
    for (i=0; i<n; i++)
    {       if (i==j)
    new_table [i] = 0;
else        cin >> new_table [i];
        adj_new [i] = (char) ('A' + i);
    }

        cout << endl;
    }

    void display()
{   cout << "\n Destination router:";
    for (i=0; i<n; i++)
        cout << (char) ('A' + i) << " ";
        cout << "\n outgoing :
    for (i=0; i<n; i++)
        cout << adj_new[i] << " ";
        cout << "\n Count :";
    for (i=0; i<n; i++)
        cout << table. new table [i] << " "; }
void    build_table() { i=0; j=0;
    while(i!=n) { for (i=j; i<n; i++)
        { r[0]. copy(); r[i]. build(i); }
    for (i=0; i<n; i++)
        if [!r[i]. equal[0] { j=i; break; }
void main()
{   cout << " Enter no. of routers
    for (i=0; i<n; i++) r[0]. input();
        build_table(); cout << endl; getch(); }
```