Bellmann Ford Alogrithm

fin : Find suitable path for transmission using Bellmann prod algorithm.

#include < stdio. h >

int Bellmon Fond (int Gr (20/20), int v. int E. int edge (20) [20]) {

int i, v, v, k, distance [20], parent (20], S, flag=1;

distance (i7 = 1000;

parent [i] = -1; }

paints ("Enter size");

scart ("id", &s);

distance (S-17 = 0;

for (i=0; KV-1; i++) {

for (i=0; KV-1; i++) {

v=edge (i)(o);

v=edge (k)(i);

il(distance G-7+=0)

is (distance [U] + G[U][V] (distance [V])

distance [V] = distance [U] + G(U[V];

powent [V] = U;

5

```
for ( k=0; k < E; k++ ) {
          C = edge [k][0]
          v = eolge [K][[]
        if Constance [U] + GRUJ[V] < distance [U])
         & flag = 0
                            edible shall as
  if (flag)
          for(i=0; i(v; i++)
            prints (" Vector "lid -> cost - "ld parent - xdla"
   i+1, distance (i], parent (i]+1);
            return plag;
                        de lane [ ] = 1000 ;
                        1 1- Fil trees
      int main () }
        int v, edge (20) [2], G(20) [20], i,j, k =0;
       prints (" Enter no. of vertices ");
        scary (" 1.0", 20);
       print (" Enter graph in matrix form: \n");
        for Ci=o; iev; i++)
           for (j=0; j<v; j++) {
 Sconf (" (d", & a (i) (i));
में (लिलिसाः ०)
              edge (K)(o)=i;
               edge [k+1][1] = j;
```

if (Bellman-ford (G, V, k, edge))

Prints ("In No negative weight cycle in");

else

prints ("In Negative weight cycle exists in");

network o;

}

Output

Enter no. of vertices: 5

Enter graph in matrix:

of of on Francis the section plan

00 5 8 -4

0-2000

0 0 -3.

winds ("Vi Edu adjecus and "V")

+41 (1121)

of MAN MAN 10

girth total showing made: "):

(a) 'b)

(10,0,0)