

lab-7

#include <stdio.h>

#include <stdlib.h>

struct node

{ int dist[15];

int from[15];

};

void main()

{ int a[15][15], n=0, i, j, k, count;

struct node s[10];

printf("Enter no. of nodes");

scanf("%d", &n);

printf("matrix :");

for(i=1; i<n; i++)

{

for(j=1; j<n; j++)

{

scanf("%d", &a[i][j]);

s[i].dist[j] = a[i][j];

s[i].from[j] = j;

}

}

do

{

count = 0;

for(k=1; k<=n; k++)

{

for(i=1; i<=n; i++)

{

for(j=1; j<=n; j++)

{

if(s[i].dist[j] > a[i][k] + s[k].dist[j])


```
{ if s[i], dist[j] = a[i][k] + s[k].dist[j];  
  s[i].from[j] = k;  
  count++;  
}
```

```
}  
}  
}  
}
```

```
while (count != 0)
```

```
for (i = 1; i < n; i++)
```

```
{ for (j = 1; j < n; j++)
```

```
{ printf("src: %.d, dist: %.d; i, j);  
}
```

```
}
```

```
}
```