

C warshall.c X C floyds.c

C warshall.c

```
1  /*To find path matrix using Warshall's algorithm*/
2  #include<stdio.h>
3  #include<conio.h>
4  void warshall();
5  int a[10][10], p[10][10], i,j,k,n;
6
7  void main()
8  {
9      printf("Enter number of vertices\n");
10     scanf("%d",&n);
11     printf("Enter adjacency matrix\n");
12     for(i=1;i<=n;i++)
13     {
14         for(j=1;j<=n;j++)
15         {
16             scanf("%d",&a[i][j]);
17         }
18     }
19     warshall();
20     printf("\nPath Matrix\n");
21     for(i=1;i<=n;i++)
22     {
23         for(j=1;j<=n;j++)
24         {
25             printf("%d ",p[i][j]);
26         }
27         printf("\n");
28     }
29     getch();
30 }
31 void warshall()
32 {
33     for(i=1;i<=n;i++)
34     {
35         for(j=1;j<=n;j++)
36         {
37             p[i][j]=a[i][j];
38         }
```

```
33 for(i=1;i<=n;i++)
34 {
35     for(j=1;j<=n;j++)
36     {
37         p[i][j]=a[i][j];
38     }
39 }
40 for(k=1;k<=n;k++)
41 {
42     for(i=1;i<=n;i++)
43     {
44         for(j=1;j<=n;j++)
45         {
46             if((p[i][j]!=1) && (p[i][k]==1 && p[k][j]==1))
47             {
48                 p[i][j]=1;
49             }
50         }
51     }
52 }
53 }
```

warshall.c x floyds.c

```
33     for(i=1;i<=n;i++)
34     {
35         for(j=1;j<=n;j++)
36         {
37             a[i][j]=1-a[i][j];
38         }
39     }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL powershell + ^ x

```
PS C:\Users\muska\OneDrive\Desktop\C programs> gcc warshall.c
PS C:\Users\muska\OneDrive\Desktop\C programs> .\a.exe
Enter number of vertices
4
Enter adjacency matrix
0 1 0 0
0 0 0 1
0 0 0 0
1 0 1 0

Path Matrix
1 1 1 1
1 1 1 1
0 0 0 0
1 1 1 1
PS C:\Users\muska\OneDrive\Desktop\C programs> |
```