

```
1  #include<stdio.h>
2  #include<conio.h>
3  void warshall();
4  int a[10][10], p[10][10], i,j,k,n;
5
6  void main()
7  {
8      printf("Enter number of vertices\n");
9      scanf("%d",&n);
10     printf("Enter adjacency matrix\n");
11     for(i=1;i<=n;i++)
12     {
13         for(j=1;j<=n;j++)
14         {
15             scanf("%d",&a[i][j]);
16         }
17     }
18     warshall();
19     printf("\nPath Matrix\n");
20     for(i=1;i<=n;i++)
21     {
22         for(j=1;j<=n;j++)
23         {
24             printf("%d ",p[i][j]);
25         }
26         printf("\n");
27     }
28     getch();
29 }
30 void warshall()
31 {
32     for(i=1;i<=n;i++)
33     {
34         for(j=1;j<=n;j++)
35         {
36             p[i][j]=a[i][j];
37         }
38     }
39     for(k=1;k<=n;k++)
40     {
41         for(i=1;i<=n;i++)
```

Start here X warshall algo.c X

```
13         for(j=1;j<=n;j++)
14     {
15         scanf("%d",&a[i][j]);
16     }
17 }
18 warshalls();
19 printf("\nPath Matrix\n");
20 for(i=1;i<=n;i++)
21 {
22     for(j=1;j<=n;j++)
23     {
24         printf("%d ",p[i][j]);
25     }
26     printf("\n");
27 }
28 getch();
29 }
30 void warshalls()
31 {
32     for(i=1;i<=n;i++)
33     {
34         for(j=1;j<=n;j++)
35         {
36             p[i][j]=a[i][j];
37         }
38     }
39     for(k=1;k<=n;k++)
40     {
41         for(i=1;i<=n;i++)
42         {
43             for(j=1;j<=n;j++)
44             {
45                 if((p[i][j]!=1) && (p[i][k]==1 && p[k][j]==1))
46                 {
47                     p[i][j]=1;
48                 }
49             }
50         }
51     }
52 }
53
```

"C:\web developement(html.css.js)\warshall algo.exe"

Enter number of vertices

4

Enter adjacency matrix

0 1 0 0

0 0 0 1

0 0 0 0

1 1 1 1

Path Matrix

1 1 1 1

1 1 1 1

0 0 0 0

1 1 1 1