**Compute the transitive closure of a given directed graph using Warshall's algorithm**

#include<stdio.h>

int n;

int a[10][10];

int p[10][10];

void write\_data( )

{

int i,j;

printf("The path matrix is shown below\n");

for(i=0;i<n;i++)

{

for(j=0;j<n;j++)

{

printf("%d", p[i][j]);

printf(" ");

}

printf("\n");

}

}

void read\_data( )

{

int i,j;

printf("Enter the no of nodes\n");

scanf("%d", &n);

printf("Enter the adjacency matrix\n");

for(i=0;i<n;i++)

{

for(j=0;j<n;j++)

{

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

}

}

}

void path\_matrix( )

{

int i,j,k;

for(i=0;i<n;i++)

{

for(j=0;j<n;j++)

p[i][j]=a[i][j];

}

for(k=0;k<n;k++)

{

for(i=0;i<n;i++)

{

for(j=0;j<n;j++)

{

if((p[i][k]==1 && p[k][j]==1))

p[i][j]=1;

}

}

}

}

void main( )

{

read\_data();

path\_matrix();

write\_data();

getch();

}

Output:

