#include <stdio.h>

#include <stdlib.h>

int a[10][10],t[10][10],n;

void path()

{

int i,j,k;

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

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

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

if((t[i][j]) || (t[i][k] && t[k][j])) t[i][j]=1;

}

}

}

}

void main()

{

int i,j;

printf("\n Enter n of vertices :");

scanf("%d",&n);

printf("\n Enter the adjacent matrix:\n");

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

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

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

t[i][j]=a[i][j];

}

path();

printf("\n The transitive clouser matrix is:\n");

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

{

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

{

printf("%5d",t[i][j]);

}

printf("\n");

}

}

OUTPUT:

Enter n of vertices :4

Enter the adjacent matrix:

0 5 8 9

99 0 3 4

99 99 0 1

99 99 99 0

The transitive clouser matrix is:

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1