```c
#include<stdio.h>
#include<conio.h>
#include<math.h>
int max(int,int);
void warshal(int p[10][10],int n) {
    int i,j,k;
    for (k=1;k<=n;k++)
      for (i=1;i<=n;i++)
       for (j=1;j<=n;j++)
         p[i][j]=max(p[i][j],p[i][k]&&p[k][j]);
}
int max(int a,int b) {
    ;
    if(a>b)
     return(a); else
     return(b);
}
void main() {
    int p[10][10]= {0},n,e,u,v,i,j;

    printf("\n Enter the number of vertices:");
    scanf("%d",&n);
    printf("\n Enter the number of edges:");
    scanf("%d",&e);
    for (i=1;i<=e;i++) {
        printf("\n Enter the end vertices of edge %d:",i);
        scanf("%d%d",&u,&v);
```

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```c
void main() {
    int p[10][10]= {0},n,e,u,v,i,j;

    printf("\n Enter the number of vertices:");
    scanf("%d",&n);
    printf("\n Enter the number of edges:");
    scanf("%d",&e);
    for (i=1;i<=e;i++) {
        printf("\n Enter the end vertices of edge %d:",i);
        scanf("%d%d",&u,&v);
        p[u][v]=1;
    }
    printf("\n Matrix of input data: \n");
    for (i=1;i<=n;i++) {
        for (j=1;j<=n;j++)
            printf("%d\t",p[i][j]);
        printf("\n");
    }
    warshal(p,n);
    printf("\n Transitive closure: \n");
    for (i=1;i<=n;i++) {
        for (j=1;j<=n;j++)
            printf("%d\t",p[i][j]);
        printf("\n");
    }
    getch();
}
```

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```
printf("\n Enter the number of vertices:");
```

input

```
Enter the number of edges:5

Enter the end vertices of edge 1:1 2

Enter the end vertices of edge 2:3 4

Enter the end vertices of edge 3:2 3

Enter the end vertices of edge 4:4 5

Enter the end vertices of edge 5:1 3

Matrix of input data:
0       1       1       0
0       0       1       0
0       0       0       1
0       0       0       0

Transitive closure:
0       1       1       1
0       0       1       1
0       0       0       1
0       0       0       0


...Program finished with exit code 0
```

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