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eexp7.c x
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 //Adjacent Matrix
5 int source, V,E,time,visited[20],G[20][20];
6 void DFS(int i)
7 {
8     int j;
9     visited[i]=1;
10    printf("%d->",i+1);
11    for(j=0;j<V;j++)
12    {
13        if(G[i][j]==1&&visited[j]==0)
14            DFS(j);
15    }
16 }
17
18 int main()
19 {
20     int i,j,v1,v2;
21     printf("\t\t\tGraphs\n");
22     printf("Enter the number of edges:\n");
23     scanf("%d",&E);
24     printf("Enter the number of vertices:\n");
25     scanf("%d",&V);
26     for(i=0;i<V;i++)
27     {
28         for(j=0;j<V;j++)
29             G[i][j]=0;
30     }
31
32     //creating edges
33     for(i=0;i<E;i++)
34     {
35         printf("Enter the edges (format: V1 V2) : ");
36         scanf("%d%d",&v1,&v2);
37         G[v1-1][v2-1]=1;
38     }
39
40     for(i=0;i<V;i++)
41     {
42         for(j=0;j<V;j++)
43             printf("%d",G[i][j]);
44         printf("\n");
45     }
46
47     printf("Enter the source: ");
48     scanf("%d",&source);
49     DFS(source-1);
50     return 0;
51 }
```

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15 }
16 }
17
18 int main()
19 {
20     int i,j,v1,v2;
21     printf("\t\t\tGraphs\n");
22     printf("Enter the number of edges:\n");
23     scanf("%d",&E);
24     printf("Enter the number of vertices:\n");
25     scanf("%d",&V);
26     for(i=0;i<V;i++)
27     {
28         for(j=0;j<V;j++)
29             G[i][j]=0;
30     }
31
32     //creating edges
33     for(i=0;i<E;i++)
34     {
35         printf("Enter the edges (format: V1 V2) : ");
36         scanf("%d%d",&v1,&v2);
37         G[v1-1][v2-1]=1;
38     }
39
40     for(i=0;i<V;i++)
41     {
42         for(j=0;j<V;j++)
43             printf("%d",G[i][j]);
44         printf("\n");
45     }
46
47     printf("Enter the source: ");
48     scanf("%d",&source);
49     DFS(source-1);
50     return 0;
51 }
```

```
Activities Terminal
Sep 12 14:54
dl416@Radmin: -
dl416@Radmin:~$ gcc wepexp7.c
dl416@Radmin:~$ ./a.out
Graphs
Enter the number of edges:
8
Enter the number of vertices:
9
Enter the edges (format: V1 V2) : 1 2
Enter the edges (format: V1 V2) : 8 3
Enter the edges (format: V1 V2) : 7 5
Enter the edges (format: V1 V2) : 1 4
Enter the edges (format: V1 V2) : 6 8
Enter the edges (format: V1 V2) : 1 6
Enter the edges (format: V1 V2) : 7 2
Enter the edges (format: V1 V2) : 1 0
0 1 0 1 0 1 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 1 0
0 1 0 0 1 0 0 0 0
0 0 1 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
Enter the source: 7
dl416@Radmin:~$
```