**#include <stdio.h>**

**#include <stdlib.h>**

**int find(int i, int parent[]){**

**int I=i;**

**while(parent[I]>=0){**

**I=parent[I];**

**}**

**return(I);**

**}**

**main(){**

**printf("Enter the number of nodes in the graph");**

**int n;**

**scanf("%d",&n);**

**int costadjacencymatrix[n][n];**

**printf("Enter the cost adjacency matrix");**

**int i;**

**int cost[n\*n][3];**

**int kk;**

**kk=0;**

**int j;**

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

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

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

**if(i<j && costadjacencymatrix[i][j]!=0){**

**cost[kk][0]=i;**

**cost[kk][1]=j;**

**cost[kk][2]=costadjacencymatrix[i][j];**

**kk=kk+1;**

**}**

**}**

**}**

**for(i=0;i<kk;i++){**

**for(j=i+1;j<kk;j++){**

**if(cost[j][2]<cost[i][2]){**

**int k;**

**for(k=0;k<3;k++){**

**int temp;**

**temp=cost[j][k];**

**cost[j][k]=cost[i][k];**

**cost[i][k]=temp;**

**}**

**}**

**}**

**}**

**int parent[n];**

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

**parent[i]=-1;**

**}**

**int totalcost;**

**totalcost=0;**

**int ck;**

**ck=0;**

**for(i=0;i<=kk;i++){**

**if(ck==n-1){**

**break;**

**}**

**if(find(cost[i][0],parent)!=find(cost[i][1],parent)){**

**printf("There is an edge from %d to %d and the cost of the edge is %d\n",cost[i][0]+1,cost[i][1]+1,cost[i][2]);**

**parent[cost[i][1]]=cost[i][0];**

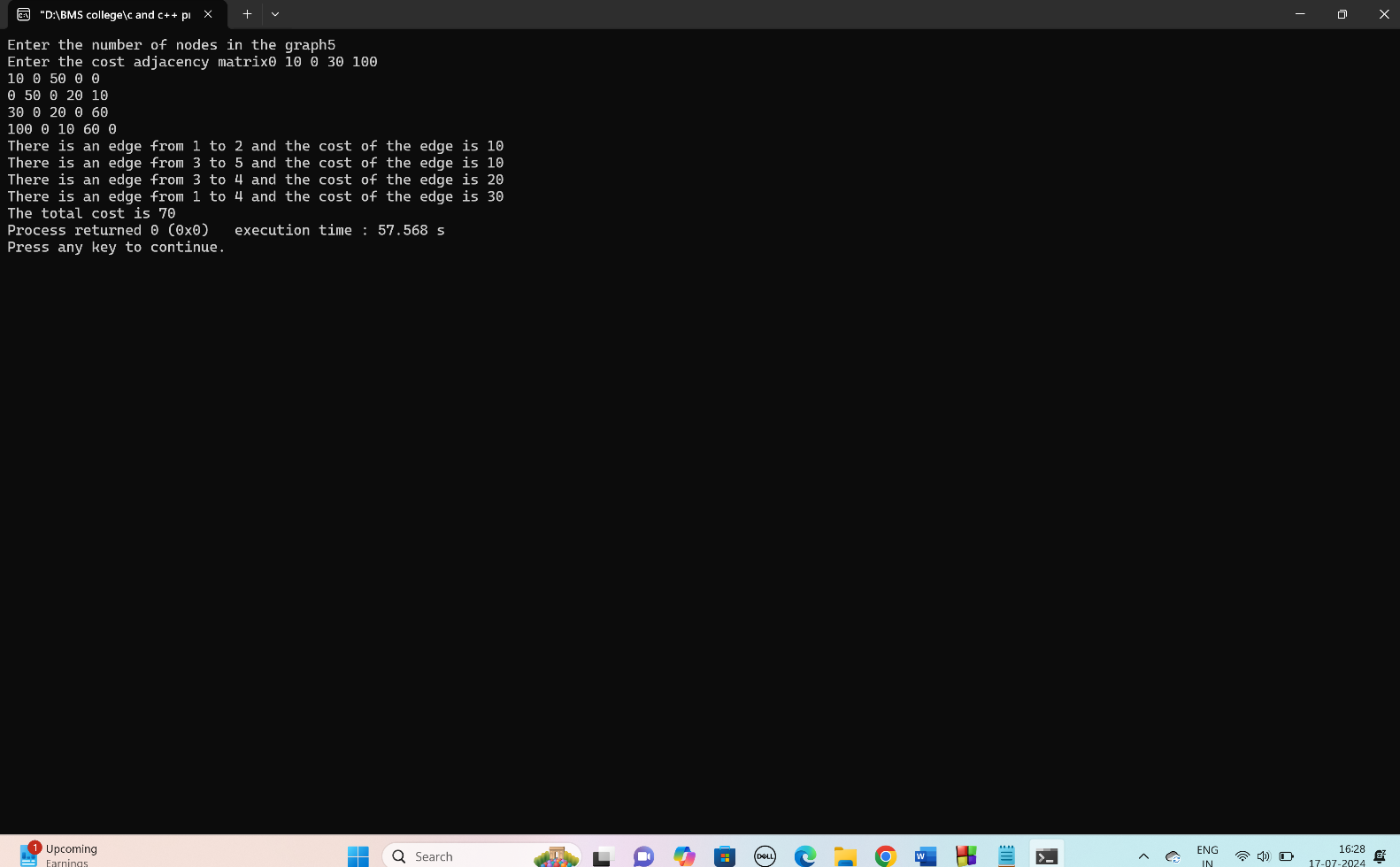
**totalcost=totalcost+cost[i][2];**

**ck=ck+1;**

**}**

**}**

**printf("The total cost is %d",totalcost);**

**}**