**DS MINI PROJECT**

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ROLL NO – A024, A050

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**TOPIC - Write Program for network minimization-transportation**

**CODE –**

**#include<iostream>**

**using namespace std;**

**int main(){**

**int cost[3][3] = {**

**{3,7,2},{5,9,2},{2,5,8}**

**};**

**int m[3][3];**

**int y[3][3];**

**int demands[3] = {200,260,150};**

**int supply[3] = {75,275,260};**

**int c[3] = {600,1710,400};**

**int a,b;**

**for(a = 0;a < 3;a = a+1){**

**for (b = 0; b < 3; b = b+1)**

**{**

**m[a][b] = 0;**

**y[a][b] = 0;**

**}**

**}**

**int x = 1;**

**int minimum\_cost = 0;**

**int minimum;**

**while(x < 2000){**

**for (a = 0; a < 3; a++)**

**{**

**for (b = 0; b < 3; b++)**

**{**

**if(demands[b] == 0 || supply[a] == 0){**

**m[a][b] = 1;**

**}**

**}**

**}**

**for (a = 0; a < 3; a++)**

**{**

**for (b = 0; b < 3; b++)**

**{**

**if(m[a][b] == 1){**

**}**

**else{**

**minimum = cost[a][b];**

**break;**

**}**

**}**

**}**

**for (a = 0; a < 3; a++)**

**{**

**for (b = 0; b < 3; b++)**

**{**

**if(m[a][b] != 1){**

**if(minimum > cost[a][b]){**

**minimum = cost[a][b];**

**}**

**}**

**}**

**}**

**for (a = 0; a < 3; a++)**

**{**

**for (b = 0; b < 3; b++)**

**{**

**if(m[a][b] != 1){**

**if(minimum == cost[a][b]){**

**while(demands[b] != 0 && supply[a] != 0){**

**demands[b]--;**

**supply[a]--;**

**y[a][b]++;**

**}**

**}**

**}**

**}**

**}**

**x = x+1;**

**}**

**int l = 1;**

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

**for (b = 0; b < 3; b++)**

**{**

**if(m[a][b] == 1){**

**l = y[a][b]\*cost[a][b];**

**minimum\_cost = minimum\_cost + l;**

**}**

**}**

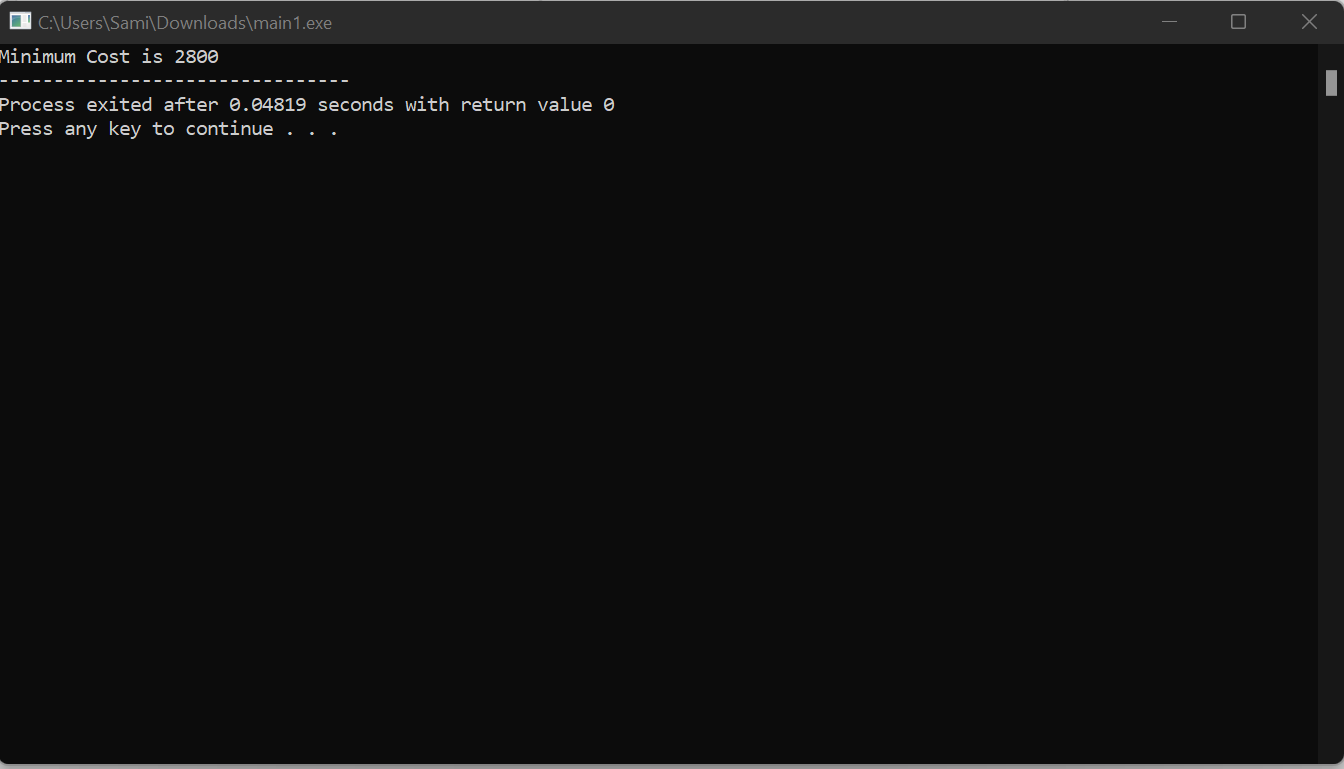
**}**

**printf("Minimum Cost is %d",minimum\_cost);**

**return 0;**

**}**

**OUTPUT –**

****