Experiment 6

#include<stdio.h>

#include<string.h>

#include<stdbool.h>

#define INF 9999999

#define V 5

int G[V][V] = {

{0, 9, 75, 0, 0},

{9, 0, 95, 19, 42},

{75, 95, 0, 51, 66},

{0, 19, 51, 0, 31},

{0, 42, 66, 31, 0}};

int main() {

int no\_edge;

int selected[V];

memset(selected, false, sizeof(selected));

no\_edge = 0;

selected[0] = true;

int x;

int y;

printf("Edge : Weight\n");

while (no\_edge < V - 1) {

int min = INF;

x = 0;

y = 0;

for (int i = 0; i < V; i++) {

if (selected[i]) {

for (int j = 0; j < V; j++) {

if (!selected[j] && G[i][j]) {

if (min > G[i][j]) {

min = G[i][j];

x = i;

y = j;

}

}

}

}

}

printf("%d - %d : %d\n", x, y, G[x][y]);

selected[y] = true;

no\_edge++;

}

return 0;

}

