

35.

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#include <stdio.h>

int parent[10];

int find(int i) {
    while (parent[i] != i) i = parent[i];
    return i;
}

int uni(int i, int j) {
    if (i != j) {
        parent[j] = i;
        return 1;
    }
    return 0;
}

int main() {
    int n, ne = 1, min, a, b, u, v, i, j;
    int cost[10][10], mincost = 0;
    printf("Enter number of vertices: ");
    scanf("%d", &n);
    printf("Enter cost adjacency matrix:\n");
    for (i = 0; i < n; i++)
        for (j = 0; j < n; j++) {
            scanf("%d", &cost[i][j]);
            if (cost[i][j] == 0) cost[i][j] = 999;
        }
    printf("Edges of MST:\n");
    while (ne < n) {
        min = 999;
        for (i = 0; i < n; i++)
            for (j = 0; j < n; j++)
```

```
Enter number of vertices: 3
Enter cost adjacency matrix:
5 4 7
8 7 6
3 2 8
Edges of MST:
2 - 1 : 2
2 - 0 : 3
Minimum cost = 5
```

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        if (cost[i][j] < min) {
            min = cost[i][j];
            a = u = i;
            b = v = j;
        }
    u = find(u);
    v = find(v);
    if (uni(u, v)) {
        printf("%d - %d : %d\n", a, b, min);
        mincost += min;
        ne++;
    }
    cost[a][b] = cost[b][a] = 999;
}
printf("Minimum cost = %d\n", mincost);
return 0;
}

```