

34.

```
#include <stdio.h>

#define INF 9999

#define MAX 10

void prim(int graph[MAX][MAX], int n) {
    int selected[MAX] = {0}, no_edge = 0, x, y;
    selected[0] = 1;
    printf("Edges in MST:\n");
    while (no_edge < n - 1) {
        int min = INF;
        for (int i = 0; i < n; i++)
            if (selected[i])
                for (int j = 0; j < n; j++)
                    if (!selected[j] && graph[i][j] && graph[i][j] < min) {
                        min = graph[i][j];
                        x = i;
                        y = j;
                    }
        printf("%d - %d : %d\n", x, y, graph[x][y]);
        selected[y] = 1;
        no_edge++;
    }
}

int main() {
    int graph[MAX][MAX], n;
    printf("Enter number of vertices: ");
    scanf("%d", &n);
    printf("Enter adjacency matrix:\n");
    for (int i = 0; i < n; i++)
        for (int j = 0; j < n; j++)
```

```
Enter number of vertices: 3
Enter adjacency matrix:
0 2 0
5 4 0
9 5 0
Edges in MST:
0 - 1 : 2
0 - 1 : 2
```

```
        scanf("%d", &graph[i][j]);  
    prim(graph, n);  
    return 0;  
}
```