Design and implement C/C++ Program to find Minimum Cost Spanning Tree of a given connected undirected graph using Prim's algorithm.

```
#include <stdio.h>
#include <limits.h>
int main() {
  int i, j, k, n, source;
  int w[50][50];
  int visited[20];
  int minWt, totalCost = 0, ev = 0, sv = 0;
  printf("Enter the number of vertices/nodes in the graph\n");
  scanf("%d", &n);
  printf("Enter the weight/cost matrix\n");
  for (i = 1; i <= n; i++) {
    for (j = 1; j \le n; j++) {
       scanf("%d", &w[i][j]);
    }
  }
  printf("Enter the source vertex to start\n");
  scanf("%d", &source);
  for (i = 1; i <= n; i++)
    visited[i] = 0;
```

```
visited[source] = 1;
printf("Minimum Weight/cost edges selected for spanning tree are:\n");
for (i = 1; i < n; i++) {
  minWt = INT_MAX;
  for (j = 1; j <= n; j++) {
    if (visited[j] == 1) {
       for (k = 1; k \le n; k++) {
         if (visited[k] != 1 && w[j][k] < minWt) {
           sv = j;
           ev = k;
           minWt = w[j][k];
         }
      }
    }
  }
  totalCost += minWt;
  visited[ev] = 1;
  printf("%d ---> %d Cost: %d\n", sv, ev, minWt);
}
printf("The total cost of minimum spanning tree is %d\n", totalCost);
return 0;
```

}