

```

# function to find the node with the lowest cost
def find_min_cost_node(costs, visited):
    min_cost = float('inf')
    min_node = None

    for node, cost in costs.items():
        if cost < min_cost and node not in visited:
            min_cost = cost
            min_node = node

    return min_node

# function to implement Prim's algorithm
def prims_algorithm(graph, start):
    visited = set()
    costs = {node: float('inf') for node in graph}
    costs[start] = 0
    mst_cost = 0

    while len(visited) < len(graph):
        # find the node with the lowest cost
        node = find_min_cost_node(costs, visited)

        if node is None:
            # there are disconnected components in the graph
            break

        # mark the node as visited
        visited.add(node)
        mst_cost += costs[node]

        # update the costs of the node's neighbors
        for neighbor, weight in graph[node]:
            if neighbor not in visited and weight < costs[neighbor]:
                costs[neighbor] = weight

    return mst_cost

# main function
if __name__ == '__main__':
    graph = {}
    n = int(input("Enter the number of nodes: "))

    # initialize the graph

```

```
for i in range(n):
    graph[i] = []

# add edges to the graph
m = int(input("Enter the number of edges: "))
for i in range(m):
    u, v, weight = map(int, input("Enter an edge and its weight: ").split())
    graph[u].append((v, weight))
    graph[v].append((u, weight))

# run Prim's algorithm starting from node 0
mst_cost = prims_algorithm(graph, 0)
print("The cost of the minimum spanning tree is:", mst_cost)
```