```
def find(parent, i):
   # Find the root of the set containing vertex i
   if parent[i] == i: # If the parent of vertex i is itself, i is the root of the set
       return i
   return find(parent, parent[i]) # Recursively find the root of the set containing vertex i
def union(parent, x, y):
   \# Union two sets represented by x and y
   x\_root = find(parent, x) # Find the root of the set containing vertex x
   y root = find(parent, y) # Find the root of the set containing vertex y
   parent[x_root] = y_root # Set the root of set containing x to be the root of set containing y
def kruskal(graph):
   n = len(graph)
   result = [] # Initialize the result list to store edges of the MST
   # Initialize parent array for Union-Find operations of size n
   # intially parent of each vertex will be vertex itself (i for i in range(n))
   parent = [i for i in range(n)]
   # Sort edges of the graph by weight in ascending order
   # for i in range(n): This outer loop iterates over each row index i in the graph matrix.
   # for j in range(i+1, n): This inner loop iterates over each column index j in the graph matrix, starting from i+1.
   # This ensures that each edge is considered only once and prevents considering
   \# edges in both directions (e.g., both (i, j) and (j, i)).
   # sorted() function sorts the list of tuples (edges) based on the first element of each tuple, which is the weight
   edges = sorted((graph[i][j], i, j) for i in range(n) for j in range(i+1, n) if graph[i][j] != 0)
   for weight, u, v in edges:
       # Iterate over sorted edges
       u\_root = find(parent, u) # Find the root of the set containing vertex u
       v\_{root} = find(parent, v) # Find the root of the set containing vertex v
        \textbf{if} \ \textbf{u\_root} \ != \ \textbf{v\_root} : \ \textit{\# If vertices u and v are not in the same set (no cycle is formed)} 
           result.append((u, v, weight)) # Add the edge (u, v) to the MST
           union(parent, u root, v root) # Union the sets containing u and v
   return result
graph = [
   [0, 4, 6, 0, 0, 0],
   [4, 0, 6, 3, 4, 0],
   [6, 6, 0, 1, 8, 0],
   [0, 3, 1, 0, 2, 3],
   [0, 4, 8, 2, 0, 7],
   [0, 0, 0, 3, 7, 0]
mst = kruskal(graph)  # Find the minimum spanning tree (MST) of the given graph
for u, v, weight in mst:
  print(f"Edge: {u} - {v}, Weight: {weight}") # Print edges of the MST
```