Program:

```
import sys


def prims_algorithm(graph, vertices):
    selected_node = [False] * vertices
    selected_node[0] = True  # Start from the first vertex
    edges = 0
    print("Edge : Weight")

    while edges < vertices - 1:
        minimum = sys.maxsize
        x = 0
        y = 0
        for i in range(vertices):
            if selected_node[i]:
                for j in range(vertices):
                    if (not selected_node[j]) and graph[i][j]:  # Not selected and there is an edge
                        if minimum > graph[i][j]:
                            minimum = graph[i][j]
                            x, y = i, j
        print(f"{x} - {y} : {graph[x][y]}")
        selected_node[y] = True
        edges += 1


# Input number of vertices
vertices = int(input("Enter the number of vertices: "))


# Input graph as an adjacency matrix
graph = []
print("Enter the adjacency matrix:")
for i in range(vertices):
```

```
    graph.append(list(map(int, input().split())))

# Execute Prim's algorithm
prims_algorithm(graph, vertices)
```

Output: