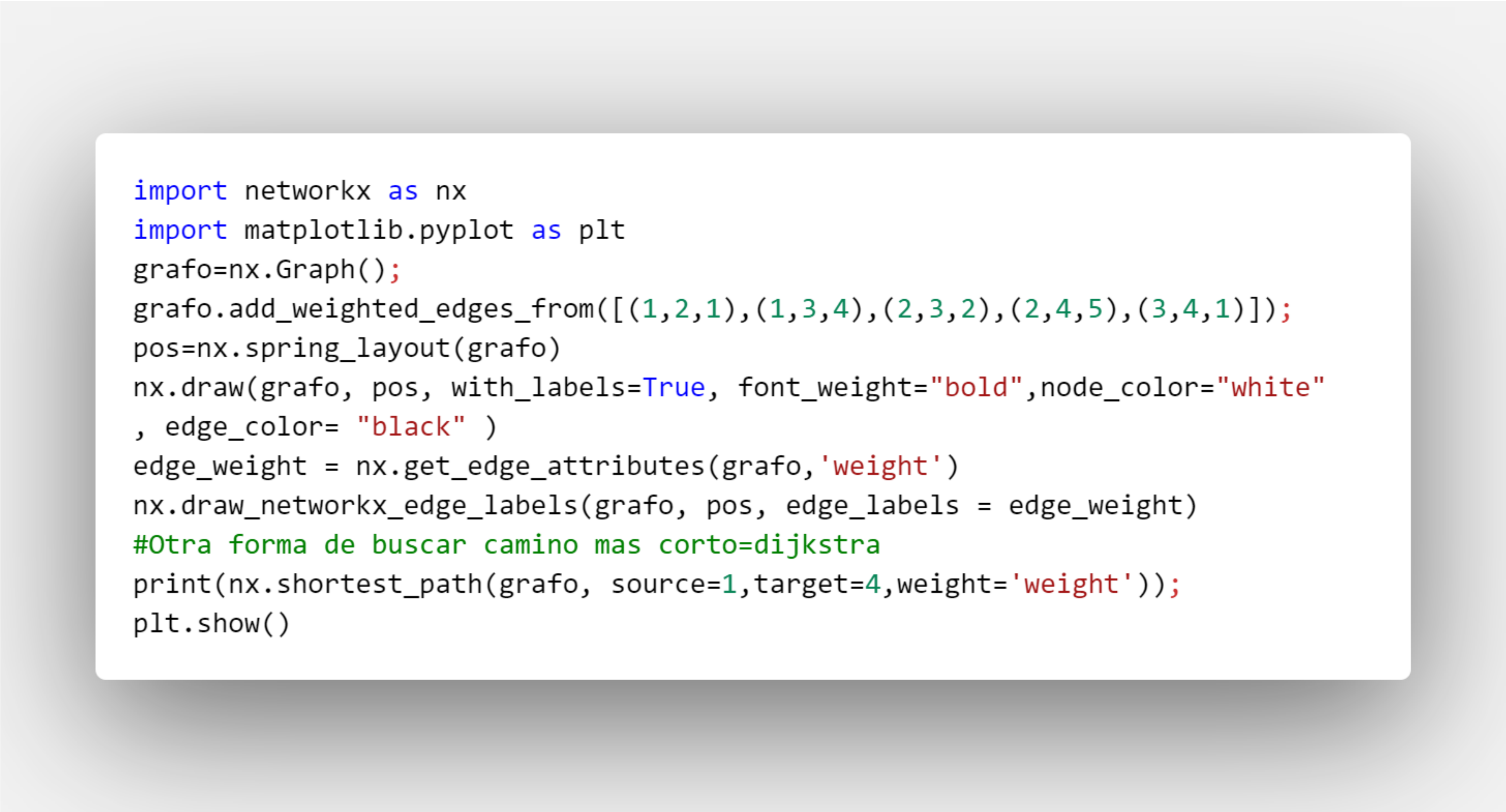
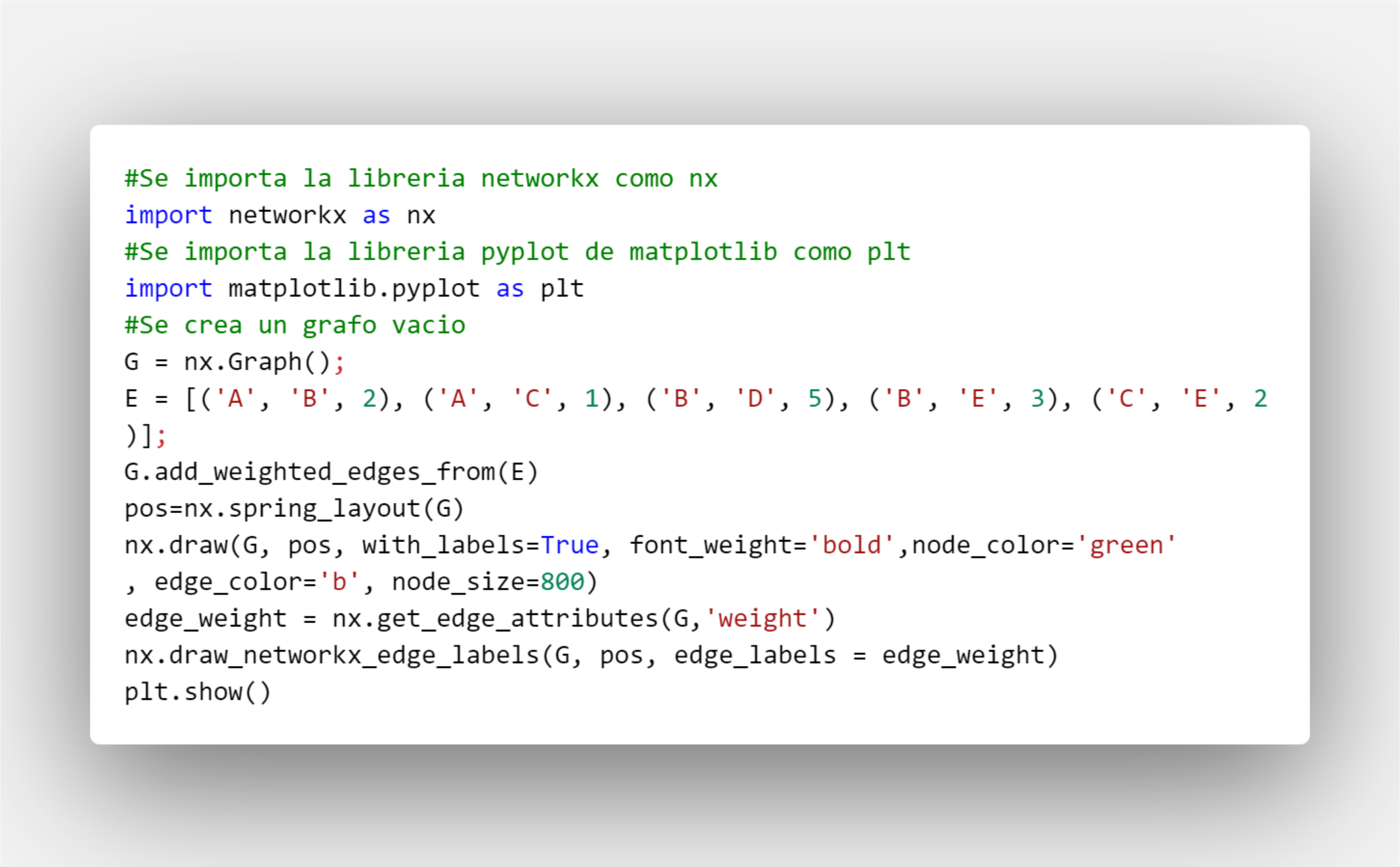
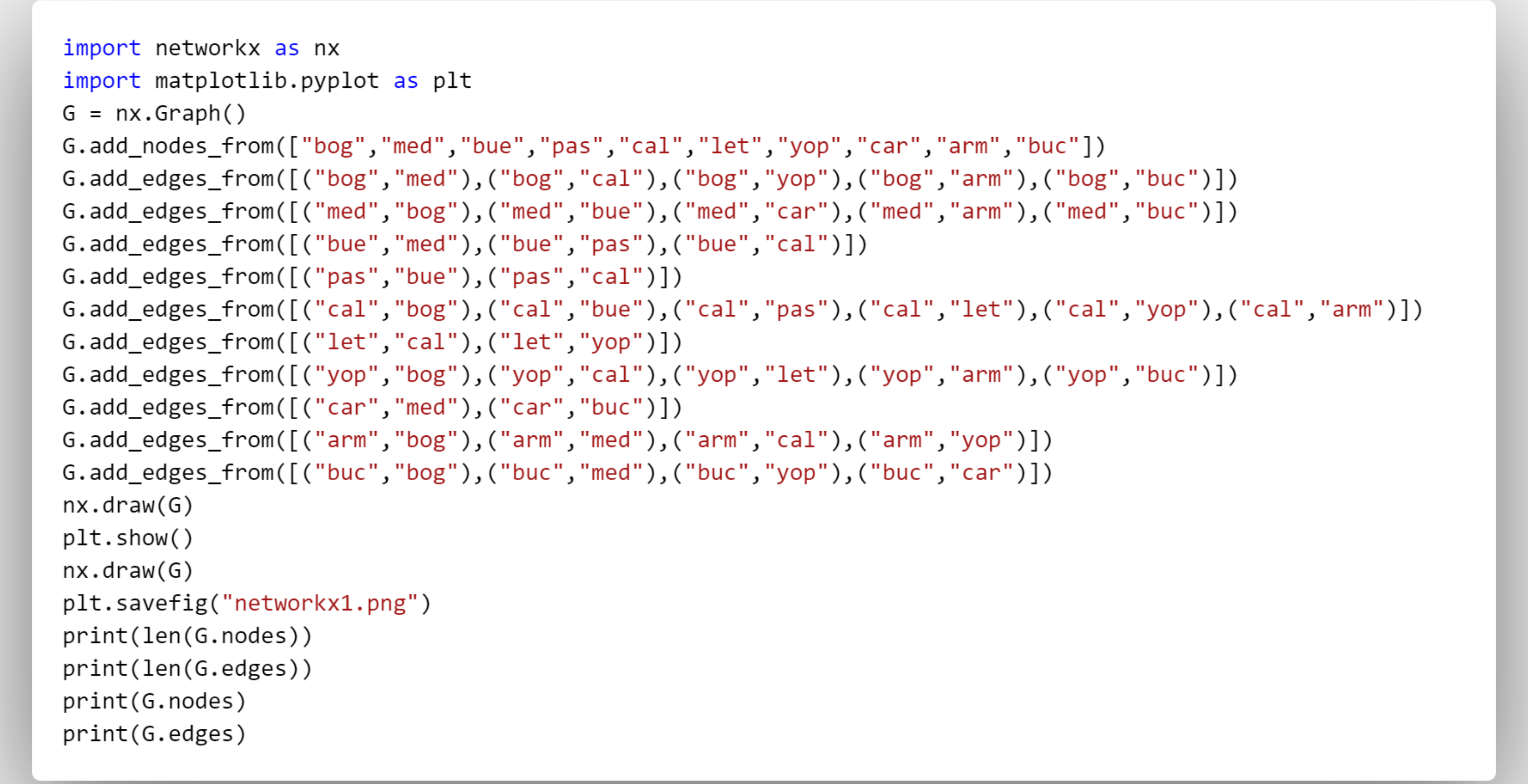


```
import networkx as nx
import matplotlib.pyplot as plt
grafo=nx.Graph();
grafo.add_weighted_edges_from([(1,2,1),(1,3,4),(2,3,2),(2,4,5),(3,4,1)]);
pos=nx.spring_layout(grafo)
nx.draw(grafo, pos, with_labels=True, font_weight="bold",node_color="white"
, edge_color= "black" )
edge_weight = nx.get_edge_attributes(grafo,'weight')
nx.draw_networkx_edge_labels(grafo, pos, edge_labels = edge_weight)
#Otra forma de buscar camino mas corto=dijkstra
print(nx.shortest_path(grafo, source=1,target=4,weight='weight'));
plt.show()
```



```
#Se importa la libreria networkx como nx
import networkx as nx
#Se importa la libreria pyplot de matplotlib como plt
import matplotlib.pyplot as plt
#Se crea un grafo vacio
G = nx.Graph();
E = [('A', 'B', 2), ('A', 'C', 1), ('B', 'D', 5), ('B', 'E', 3), ('C', 'E', 2
)];
G.add_weighted_edges_from(E)
pos=nx.spring_layout(G)
nx.draw(G, pos, with_labels=True, font_weight='bold',node_color='green'
, edge_color='b', node_size=800)
edge_weight = nx.get_edge_attributes(G,'weight')
nx.draw_networkx_edge_labels(G, pos, edge_labels = edge_weight)
plt.show()
```



```python
import networkx as nx
import matplotlib.pyplot as plt
G = nx.Graph()
G.add_nodes_from(["bog","med","bue","pas","cal","let","yop","car","arm","buc"])
G.add_edges_from([("bog","med"),("bog","cal"),("bog","yop"),("bog","arm"),("bog","buc")])
G.add_edges_from([("med","bog"),("med","bue"),("med","car"),("med","arm"),("med","buc")])
G.add_edges_from([("bue","med"),("bue","pas"),("bue","cal")])
G.add_edges_from([("pas","bue"),("pas","cal")])
G.add_edges_from([("cal","bog"),("cal","bue"),("cal","pas"),("cal","let"),("cal","yop"),("cal","arm")])
G.add_edges_from([("let","cal"),("let","yop")])
G.add_edges_from([("yop","bog"),("yop","cal"),("yop","let"),("yop","arm"),("yop","buc")])
G.add_edges_from([("car","med"),("car","buc")])
G.add_edges_from([("arm","bog"),("arm","med"),("arm","cal"),("arm","yop")])
G.add_edges_from([("buc","bog"),("buc","med"),("buc","yop"),("buc","car")])
nx.draw(G)
plt.show()
nx.draw(G)
plt.savefig("networkx1.png")
print(len(G.nodes))
print(len(G.edges))
print(G.nodes)
print(G.edges)
```