

Minimum Spanning Tree

July 9, 2020

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In [ ]: import networkx as nx
import pygraphviz as pgv
from nxpd import draw, nxpdParams
nxpdParams['show'] = 'ipynb'

G = nx.Graph()
G.add_edges_from([
    ('a', 'b', {'weight':2, 'label': 2}),
    ('a', 'c', {'weight':3, 'label': 3}),
    ('a', 'd', {'weight':1, 'label': 1}),
    ('a', 'e', {'weight':3, 'label': 3}),
    ('b', 'c', {'weight':4, 'label': 4}),
    ('c', 'd', {'weight':5, 'label': 5}),
    ('d', 'e', {'weight':4, 'label': 4}),
    ('e', 'a', {'weight':1, 'label': 1})
])
draw(G, layout='circo')

In [ ]: T = nx.minimum_spanning_tree(G)
for e in T.edges():
    G[e[0]][e[1]]['color'] = 'blue'
draw(G, layout='circo')
```