

Untitled9

December 1, 2022

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[1]: file = 'g1A01A.csv'
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[6]: import csv

current_state = []
next_state_e58 = []
next_state_e81 = []
next_state_e87 = []

output_e58 = []
output_e81 = []
output_e87 = []

with open(file) as csvfile:
    reader = csv.reader(csvfile, delimiter=",")
    counter_i = 0
    for row in reader:
        counter_i += 1
        if counter_i > 6:
            current_state.append(row[0].strip())
            next_state_e58.append(row[1].strip())
            next_state_e81.append(row[2].strip())
            next_state_e87.append(row[3].strip())
            output_e58.append(row[4].strip())
            output_e81.append(row[5].strip())
            output_e87.append(row[6].strip())
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[10]: len(set(current_state))
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[10]: 16
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[18]: entry_state = "s47"
exit_state = "s85"

inputs = ["e58", "e81", "e87"]
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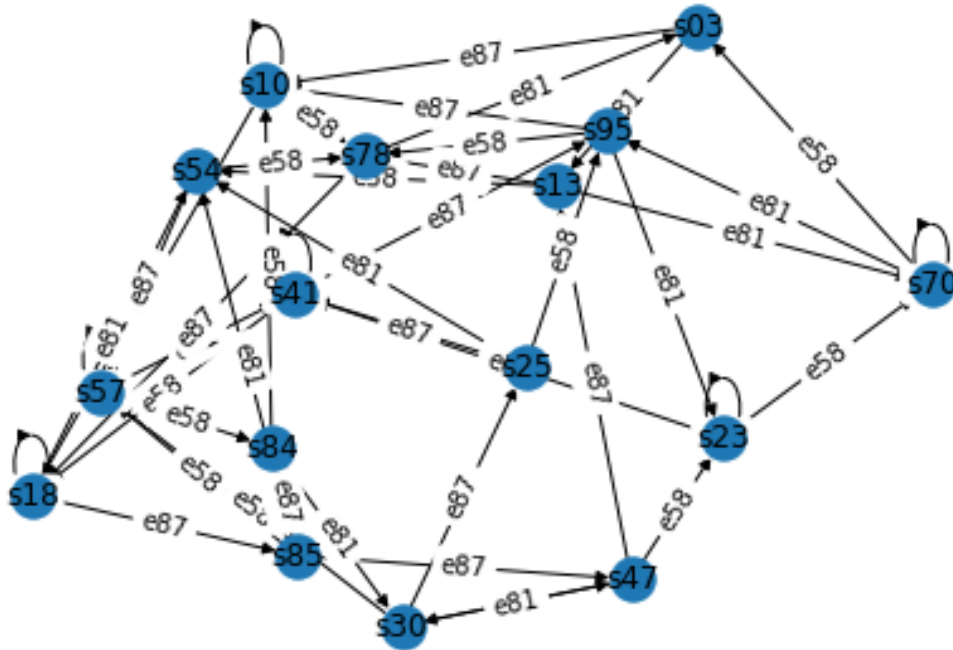
labels= dict()
import networkx as nx
g = nx.DiGraph()
for i in range(0, len(current_state)):
    g.add_edge(current_state[i], next_state_e58[i],
               e_in=inputs[0], o_out=output_e58[i])
    labels[(current_state[i], next_state_e58[i])] = inputs[0]
    g.add_edge(current_state[i], next_state_e81[i],
               e_in=inputs[1], o_out=output_e81[i])
    labels[(current_state[i], next_state_e81[i])] = inputs[1]
    g.add_edge(current_state[i], next_state_e87[i],
               e_in=inputs[2], o_out=output_e87[i])
    labels[(current_state[i], next_state_e87[i])] = inputs[2]

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[20]: import matplotlib.pyplot as plt
pos = nx.spring_layout(g)
nx.draw(g, pos=pos, with_labels=True)
nx.draw_networkx_edge_labels(g, pos, edge_labels=labels)
plt.show()

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