In [22]:

```
1 G = nx.from_pandas_edgelist(edges, *edges.columns)
2 print(G.edges(data = True))
```

```
[('israel', 'judah', {'weight': 100}), ('israel', 'david',
'moses', {'weight': 67}), ('israel', 'jerusalem', {'weight'
{'weight': 40}), ('israel', 'jeroboam', {'weight': 33}), ('
31}), ('israel', 'aaron', {'weight': 31}), ('israel', 'phil
('israel', 'sin', {'weight': 26}), ('israel', 'joshua', {'w
olomon', {'weight': 22}), ('israel', 'samaria', {'weight':
{'weight': 21}), ('israel', 'benjamin', {'weight': 21}), ('
t': 19}), ('israel', 'moab', {'weight': 17}), ('israel', 'a
srael', 'ephraim', {'weight': 17}), ('israel', 'pharaoh', {
'eleazar', {'weight': 16}), ('israel', 'ahab', {'weight': 1
{'weight': 15}), ('israel', 'samuel', {'weight': 15}), ('is
ght': 15}), ('israel', 'reuben', {'weight': 14}), ('israel'
4}), ('israel', 'joash', {'weight': 14}), ('israel', 'gilea
el', 'asa', {'weight': 12}), ('israel', 'amaziah', {'weight
h', {'weight': 12}), ('israel', 'dan', {'weight': 11}), ('i
t': 11}), ('israel', 'nebat', {'weight': 10}), ('israel', '
('israel', 'joab', {'weight': 9}), ('israel', 'rehoboam', {
'baasha', {'weight': 9}), ('israel', 'hezekiah', {'weight':
a', {'weight': 8}), ('israel', 'abraham', {'weight': 8}), (
t': 8}), ('israel', 'edom', {'weight': 8}), ('israel', 'jeh
l', 'jonathan', {'weight': 7}), ('israel', 'isaac', {'weigh
m', {'weight': 7}), ('israel', 'gad', {'weight': 7}), ('isr
```

2. Compute Adjacency Matrix

An adjacency matrix A is a square $N \times N$ matrix, w
of grah to be definied. The row and colun indexes in
and tharget nodes, respectively.

In our case it is undirected and weighted, numbers a
(positive).