**Airports 6 nodig**

Create(Schiphol:Airport{name:'Schiphol',city:'Amsterdam',size:'Medium',capacity:1500}),

(Venezia:Airport{name:'Venezia Marco Polo',city:'Venezia' ,size:'Medium',capacity:1550}),

(Heathrow:Airport{name:'Heathrow',city:'London' ,size:'Large',capacity:2000}),

(Rome:Airport{name:'Rome Airport',city:'Rome' ,size:'Large',capacity:2150}),

(Berlin:Airport{name:'Berlin Airport',city:'Berlin' ,size:'Medium',capacity:1600}),

(Stockholm:Airport{name:'Stockholm Airport',city:'Stockholm', size:'Small',capacity:800})

;

**Terminal 30 nodig**

Create(ta:Terminal{tname:'Terminal A', open:true}),

(tb:Terminal{tname:'Terminal B',open:true }),

(tc:Terminal{tname:'Terminal C', open:true }),

(td:Terminal{tname:'Terminal D', open:false }),

(te:Terminal{tname:'Terminal E', open: false }),

(tf:Terminal{tname:'Terminal F', open:true}),

(tg:Terminal{tname:'Terminal G',open:true }),

(th:Terminal{tname:'Terminal H', open:true }),

(ti:Terminal{tname:'Terminal I', open:false }),

(tj:Terminal{tname:'Terminal J', open: false }),

(tk:Terminal{tname:'Terminal K', open:true}),

(tl:Terminal{tname:'Terminal L',open:true }),

(tm:Terminal{tname:'Terminal M', open:true }),

(tn:Terminal{tname:'Terminal N', open:false }),

(to:Terminal{tname:'Terminal O', open: false }),

(tp:Terminal{tname:'Terminal P', open:true}),

(tq:Terminal{tname:'Terminal Q',open:true }),

(tr:Terminal{tname:'Terminal R', open:true }),

(ts:Terminal{tname:'Terminal S', open:false }),

(tt:Terminal{tname:'Terminal T', open: false }),

(tu:Terminal{tname:'Terminal U', open:true}),

(tv:Terminal{tname:'Terminal V',open:true }),

(tw:Terminal{tname:'Terminal W', open:true }),

(tx:Terminal{tname:'Terminal X', open:false }),

(ty:Terminal{tname:'Terminal Y', open: false }),

(tz:Terminal{tname:'Terminal Z', open:true}),

(taa:Terminal{tname:'Terminal AA',open:true }),

(tbb:Terminal{tname:'Terminal BB', open:true }),

(tcc:Terminal{tname:'Terminal CC', open:false }),

(tdd:Terminal{tname:'Terminal DD', open: false })

;

**Gates 90 nodig**

Create(g1:gate{gateNumber:'Gate 1',state: ‘Boarding’}),(g2:gate{gateNumber:'Gate 2'}), (g4:gate{gateNumber:'Gate 3'}),(g3:gate{gateNumber:'Gate 2'}),

(g5:gate{gateNumber:'Gate 5'}),(g6:gate{gateNumber:'Gate 6'}),

(g7:gate{gateNumber:'Gate 7'}),(g8:gate{gateNumber:'Gate 8'}),

(g9:gate{gateNumber:'Gate 9'}),(g10:gate{gateNumber:'Gate 10'}),

(g11:gate{gateNumber:'Gate 11'}),(g12:gate{gateNumber:'Gate 12'}),

(g13:gate{gateNumber:'Gate 13'}),(g14:gate{gateNumber:'Gate 14'}),

(g15:gate{gateNumber:'Gate 15'});

**Bedrijven 5 nodig**

Create(Lufthansa:company{name:'Lufthansa'}),(KLM:company{name:'KLM'}),(RyanAir:company{name:'RyanAir'}),(Corendon:company{name:'Corendon'}),(Ruair:company{name:'Ruair'});

**Flights**

Create(f1:Flight{number: 'FL23'}),(f2:Flight{number: 'FL653'}),(f3:Flight{number: 'FL222'}),(f4:Flight{number: 'FL109'}),(f5:Flight{number: 'FL666'});

**Gates linken aan terminals**

Match(g1:gate{gateNumber:'Gate 4'}), (g2:gate{gateNumber:'Gate 5'}), (g3:gate{gateNumber:'Gate 6'}),(t:Terminal{tname:'Terminal B'})

Create(g1)-[st1:state{state: 'Boarding'}]->(t), (g2)-[st2:state{state: 'Closed'}]->(t), (g3)-[st3:state{state: 'Closed'}]->(t)

**Terminals linken aan airports**

Match(ta:Terminal{tname:'Terminal A'}),(bt:Terminal{tname:'Terminal B'}),(ct:Terminal{tname:'Terminal C'}),(td:Terminal{tname:'Terminal D'}),(te:Terminal{tname:'Terminal E'}),(air:Airport{name:'Venezia Marco Polo'})

Create(air)-[h1:Has]->(ta), (air)-[h2:Has]->(tb), (air)-[h3:Has]->(tc), (air)-[h4:Has]->(td), (air)-[h5:Has]->(te)

Return codes

1

Match(a:Airport{ size:'Large'})

return a.name,a.capacity;

2

Match(a:Airport)

return a.location, sum(a.capacity);

3

Match(a:Airport)

Return a.name,a.capacity

order by a.capacity DESC

LIMIT 1;

4

Match(a:Airport{name:'Schiphol'})-[i:Includes]-(t: Terminal {open:'Yes'})

return t,a;

5

Match(a:Airport{location:'London'})-[i:Includes]-(t: Terminal)

return a,t;

6  
match (a: Airport{name:'Venezia Marco Polo'})-[:Includes]->(t:Terminal{tname:'Terminal B'})-[:Belongs]->(g:gate{state:'Boarding'})

return g.gateNumber,g.state;

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