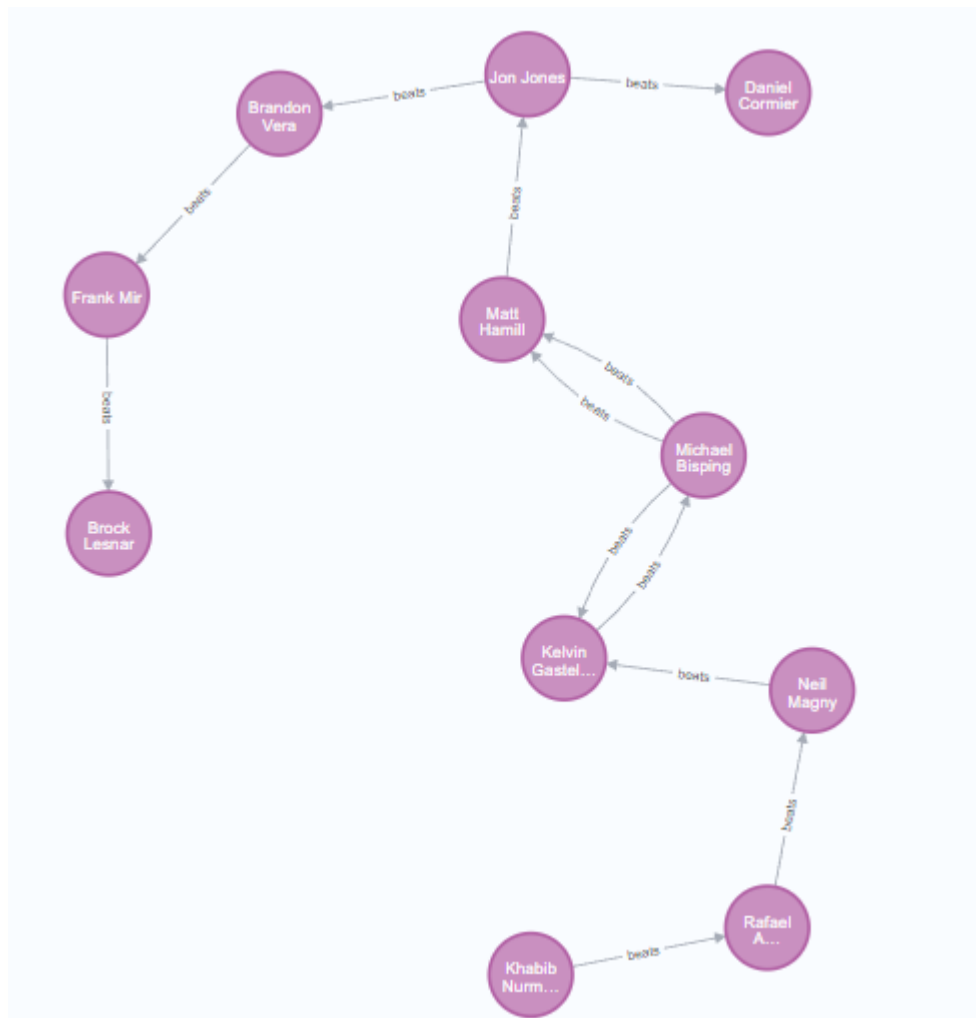


### Task 1:

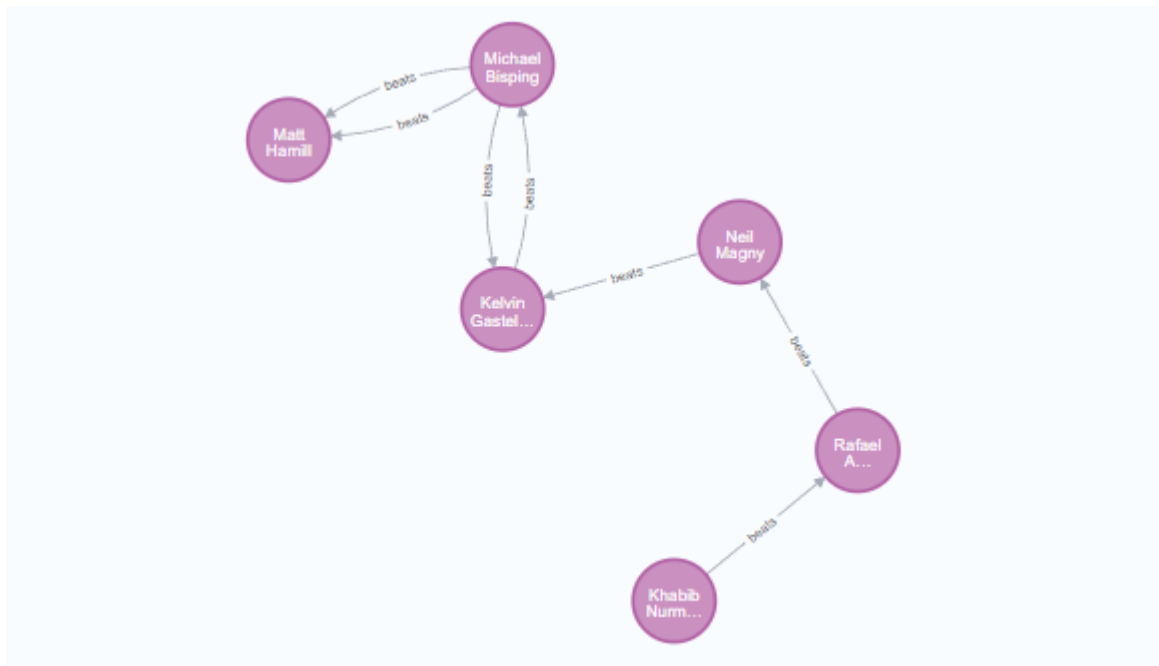
```
Create(kn:Fighter {name: 'Khabib Nurmagomedov', weight: '155'}), (rda: Fighter {name: 'Rafael Dos Anjos', weight: '155'}), (nm: Fighter {name: 'Neil Magny', weight: '170'}), (jj: Fighter {name: 'Jon Jones', weight: '205'}), (dc: Fighter {name: 'Daniel Cormier', weight: '205'}), (mb: Fighter {name: 'Michael Bisping', weight: '185'}), (bv: Fighter {name: 'Brandon Vera', weight: '205'}), (mh: Fighter {name: 'Matt Hamill', weight: '185'}), (fm: Fighter {name: 'Frank Mir', weight: '230'}), (bl: Fighter {name: 'Brock Lesnar', weight: '230'}), (kg: Fighter {name: 'Kelvin Gastelum', weight: '185'}), (kn)-[:beats]->(rda), (rda)-[:beats]->(nm), (jj)-[:beats]->(dc), (mb)-[:beats]->(mh), (jj)-[:beats]->(bv), (bv)-[:beats]->(fm), (fm)-[:beats]->(bl), (nm)-[:beats]->(kg), (kg)-[:beats]->(mb), (mb)-[:beats]->(mh), (mb)-[:beats]->(kg), (mh)-[:beats]->(jj))
```

**MATCH** (fighter:Fighter) **RETURN** fighter

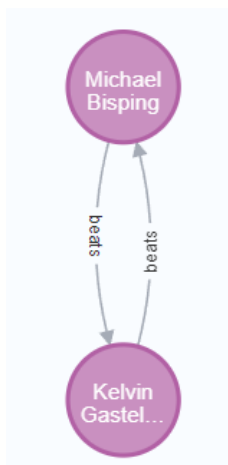


Queries:

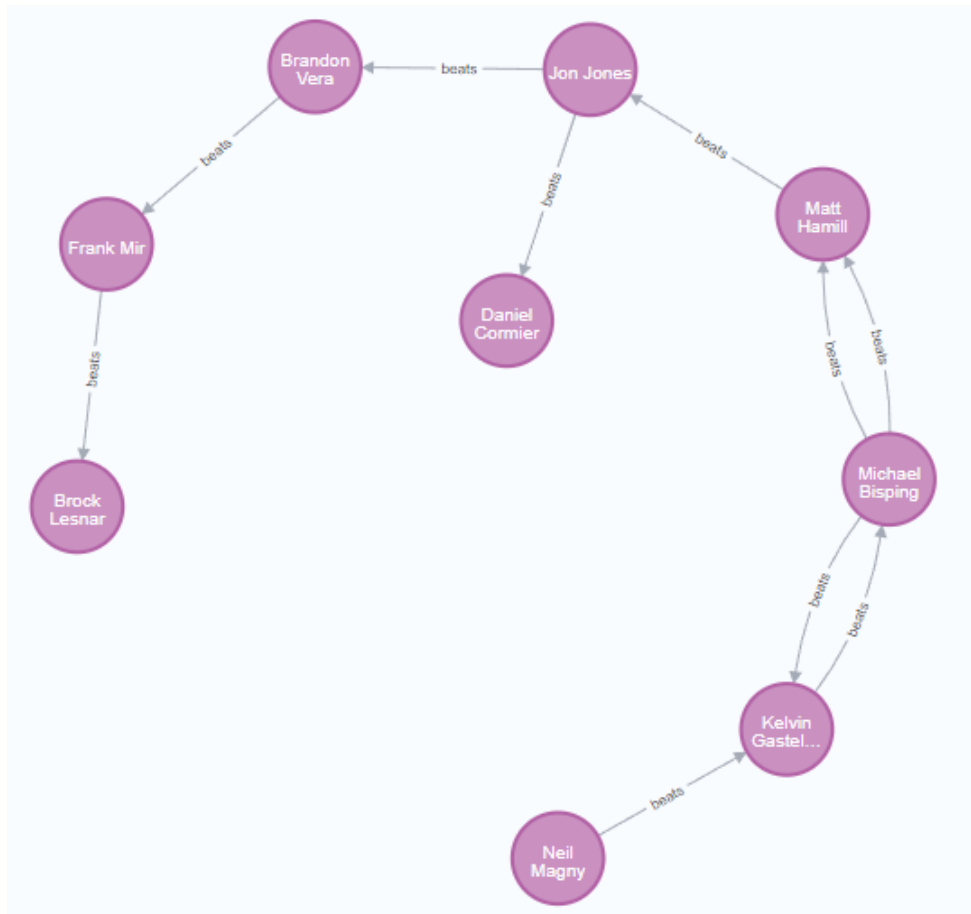
- 1) **MATCH** (f1:Fighter)-[:beats]->(f2:Fighter) **WHERE** f1.weight='155' OR f1.weight='170' OR f1.weight='185' **RETURN** f1



- 2) **MATCH** (f1:Fighter)-[:beats]->(f2:Fighter), (f2:Fighter)-[:beats]->(f1:Fighter) **RETURN** f1,f2

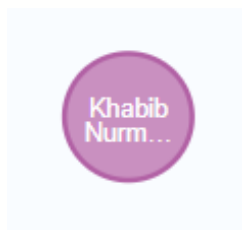


3) **MATCH** (f1:Fighter)-[:beats \*]->(f2:Fighter) **WHERE** f1.name='Khabib Nurmagomedov' **RETURN** f2



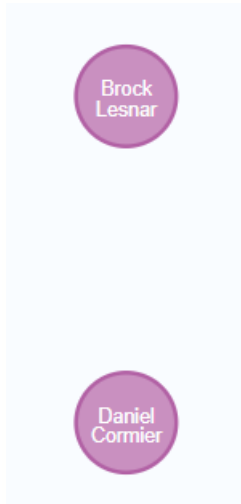
4) **Winners:**

**MATCH** (f1:Fighter)-[:beats \*]->(f2:Fighter) **WITH** collect(**DISTINCT** f2) **AS** f2s  
**MATCH** (f:Fighter) **WHERE** NOT f **IN** f2s **RETURN** f



Losers:

```
MATCH (f1:Fighter)-[r:beats *]->(f2:Fighter) WITH collect(DISTINCT f1) AS f1s
MATCH (f:Fighter) WHERE NOT f IN f1s RETURN f
```



5) Create wins record:

```
MATCH (f:Fighter)-[r:beats]->() WITH f, COUNT(r) AS wins SET f.wins=wins
RETURN f
```

Create loss record:

```
MATCH ()-[r:beats]->(f:Fighter) WITH f, COUNT(r) AS loses SET f.loses=loses
RETURN f
```

Result:

```
MATCH (f:Fighter) RETURN f
```

{ "wins":1, "name": "Khabib Nurmagomedov", "weight": "155" }
{ "wins":1, "loses":1, "name": "Rafael Dos Anjos", "weight": "155" }
{ "wins":1, "loses":1, "name": "Neil Magny", "weight": "170" }
{ "wins":2, "loses":1, "name": "Jon Jones", "weight": "205" }
{ "name": "Daniel Cormier", "loses":1, "weight": "205" }
{ "wins":3, "loses":1, "name": "Michael Bisping", "weight": "185" }
{ "wins":1, "loses":1, "name": "Brandon Vera", "weight": "205" }
{ "wins":1, "loses":2, "name": "Matt Hamill", "weight": "185" }
{ "wins":1, "loses":1, "name": "Frank Mir", "weight": "230" }
{ "name": "Brock Lesnar", "loses":1, "weight": "230" }
{ "wins":1, "loses":2, "name": "Kelvin Gastelum", "weight": "185" }

