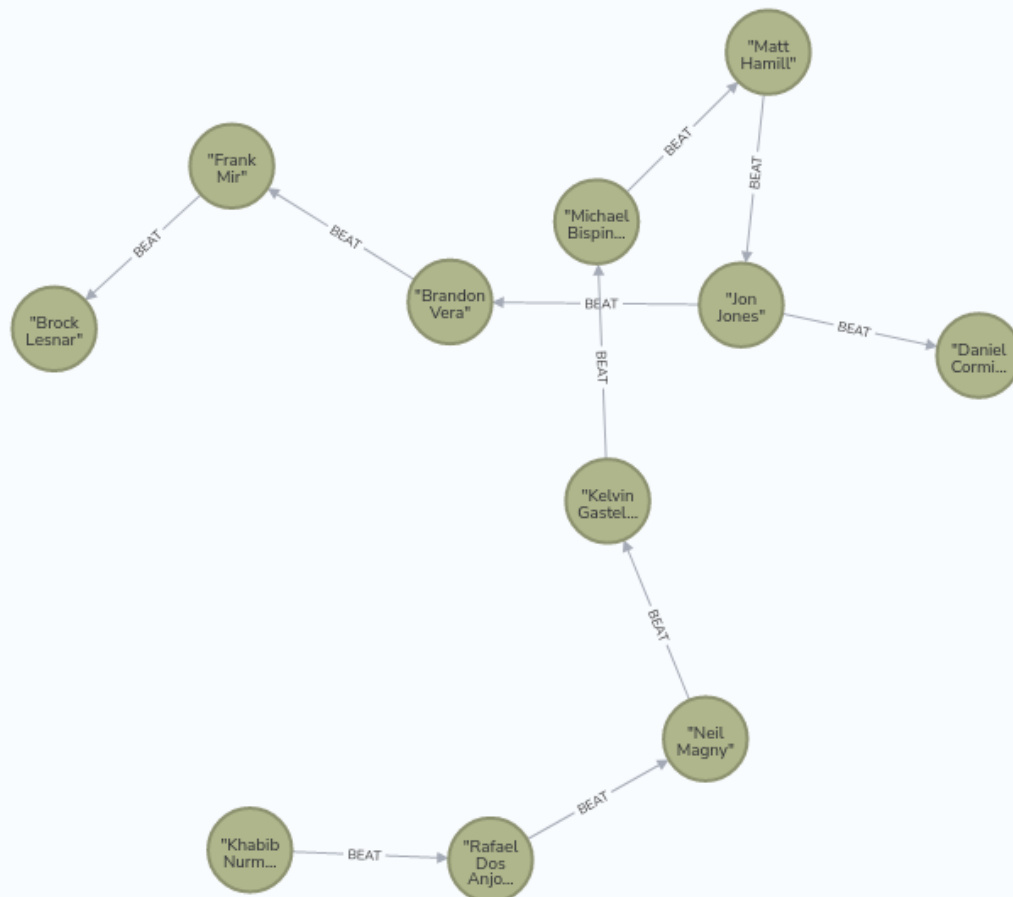# DB Networks - Lab 11?

Task 1

```
CREATE (khabib:Fighter {name: 'Khabib Nurmagomedov', weight:
155})
CREATE (dosAnjos:Fighter {name: 'Rafael Dos Anjos', weight:
155})
CREATE (magny:Fighter {name: 'Neil Magny', weight: 170})
CREATE (jones:Fighter {name: 'Jon Jones', weight: 205})
CREATE (cormier:Fighter {name: 'Daniel Cormier', weight: 205})
CREATE (bisping:Fighter {name: 'Michael Bisping', weight: 185})
CREATE (hamill:Fighter {name: 'Matt Hamill', weight: 185})
CREATE (vera:Fighter {name: 'Brandon Vera', weight: 205})
CREATE (mir:Fighter {name: 'Frank Mir', weight: 230})
CREATE (lesnar:Fighter {name: 'Brock Lesnar', weight: 230})
CREATE (gastelum:Fighter {name: 'Kelvin Gastelum', weight: 185})

CREATE (khabib)-[:BEAT]->(dosAnjos)
CREATE (dosAnjos)-[:BEAT]->(magny)
CREATE (jones)-[:BEAT]->(cormier)
CREATE (bisping)-[:BEAT]->(hamill)
CREATE (jones)-[:BEAT]->(vera)
CREATE (vera)-[:BEAT]->(mir)
CREATE (mir)-[:BEAT]->(lesnar)
CREATE (magny)-[:BEAT]->(gastelum)
CREATE (gastelum)-[:BEAT]->(bisping)
CREATE (bisping)-[:BEAT]->(hamill)
CREATE (bisping)-[:BEAT]->(gastelum)
CREATE (hamill)-[:BEAT]->(jones)
```

Task 2

1.

```
MATCH (f:Fighter)-[:BEAT]->()
WHERE f.weight IN [155, 170, 185]
WITH f.weight as weight, count(distinct f) as num_fighters
WHERE num_fighters > 0
RETURN weight, num_fighters
```

```
$  MATCH (f:Fighter)-[:BEAT]→() WHERE f.weight IN [155, 170, 185] WITH f.we  🔖  ⊙     ∧  ↗  ✕
```

Table   RAW   ⬇

weight	num_fighters
185	3
155	2
170	1

Showing **1-3** of **3** results   Show   50 ∨

2.

```
MATCH (f1:Fighter)-[:BEAT]->(f2:Fighter)
MATCH (f2)-[:BEAT]->(f1)
WHERE f1 <> f2
RETURN f1.name as name1, f2.name as name2, count(*) as cnt
```

```
$  MATCH (f1:Fighter)-[:BEAT]→(f2:Fighter) MATCH (f2)-[:BEAT]→(f1) WHERE f  🔖  ⊙     ∧  ↗  ✕
```

Table   RAW   ⬇

name1	name2	cnt
"Michael Bisping"	"Kelvin Gastelum"	1
"Kelvin Gastelum" 🗗	"Michael Bisping"	1

"Kelvin Gastelum"

Showing **1-2** of **2** results   Show   50 ∨

3.

```
MATCH (f:Fighter)
OPTIONAL MATCH (f)-[:BEAT]->()
WITH f, count(*) as cnt
```

```
ORDER BY cnt DESC
RETURN f.name, cnt
```

```
$  MATCH (f:Fighter) OPTIONAL MATCH (f)-[:BEAT]→() WITH f, count(*) as cnt  🔖  ⊙     ∧  ↗  ✕
```

Table RAW   ⬇

f.name	cnt
"Michael Bisping"	3
"Jon Jones"	2
"Matt Hamill"	1
"Brandon Vera"	1
"Frank Mir"	1

4.

```
MATCH (f:Fighter)
OPTIONAL MATCH (f)-[:BEAT]->(opponent)
WITH f, count(opponent) as num_wins
WHERE num_wins = 0 OR num_wins IS NULL
RETURN
  case when num_wins = 0 then 'Undefeated' else 'Defeated' end
as status,
  collect(f.name) as fighters
```

```
1  MATCH (f:Fighter)
2  OPTIONAL MATCH (f)-[:BEAT]→(opponent)
3  WITH f, count(opponent) as num_wins
4  WHERE num_wins = 0 OR num_wins IS NULL
5  RETURN
6    case when num_wins = 0 then 'Undefeated' else 'Defeated' end as status,
7    collect(f.name) as fighters
```

Table   RAW

status	fighters
"Undefeated"	["Brock Lesnar", "Daniel Cormier"]

Showing **1** of **1** results

Show 50 ⌄

```
1  MATCH (f:Fighter)
2  OPTIONAL MATCH (f)-[:BEAT]→(opponent)
3  WITH f, count(opponent) as num_wins
4  WHERE num_wins = 0 OR num_wins IS NULL
```