

Assignment 09:- Neo4j

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In this assignment, we have been asked to submit the neo4j queries for the “Movie Recommendations” datasets.

1. Write a Cypher query to return all actors who played a role in any of these movies: “The Matrix Revolutions”, “The Matrix Reloaded” or “The Matrix”.

Code:

```
1 MATCH (:Movie {title: "The Matrix"})←[:ACTED_IN]-(actor)
2 RETURN actor.name
3 UNION
4 MATCH (:Movie {title: "The Matrix Reloaded"})←[:ACTED_IN]-(actor)
5 RETURN actor.name
6 UNION
7 MATCH (:Movie {title: "The Matrix Revolutions"})←[:ACTED_IN]-(actor)
8 RETURN actor.name;
9
```

Output:

	Table	RAW
	actor.name	
1	"Emil Eifrem"	
2	"Hugo Weaving"	
3	"Laurence Fishburne"	
4	"Carrie-Anne Moss"	
5	"Keanu Reeves"	

2. Create a Matching to add Producer and Writer for the movie “The Devil’s Advocate”. (Create a node for a new producer and writer if not in the data.)

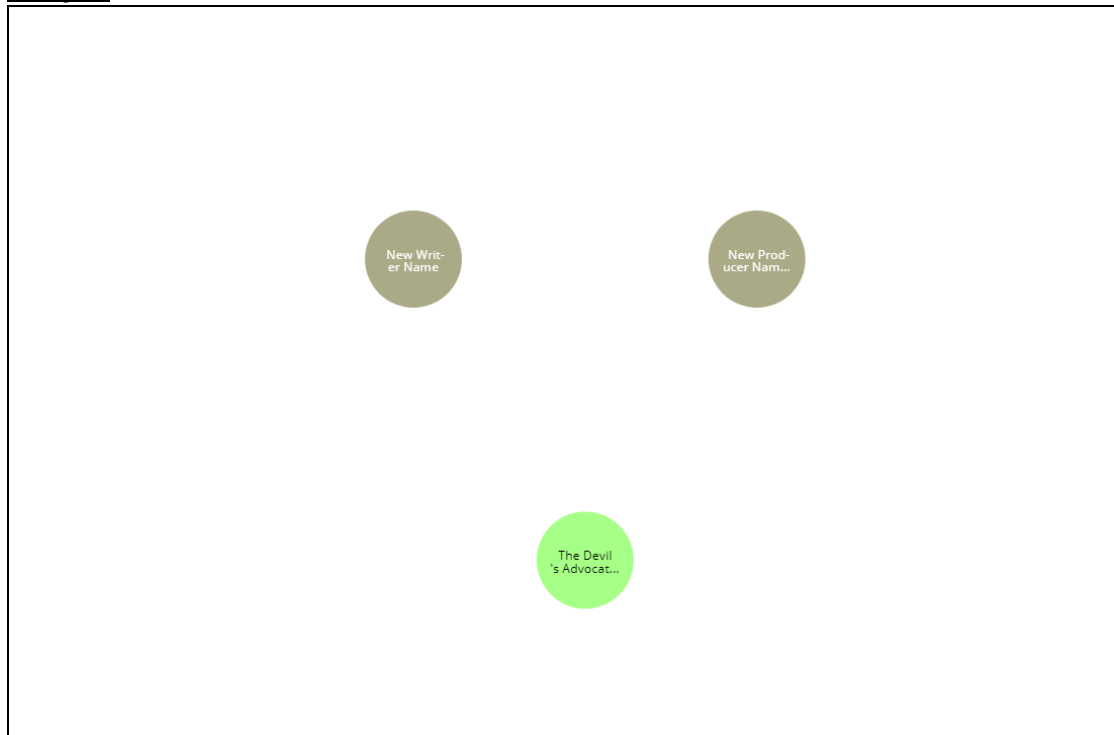
Code:

```
1 MATCH (movie:Movie {title: "The Devil's Advocate"})
2 MERGE (producer:Person {name: "New Producer Name"})
3 MERGE (writer:Person {name: "New Writer Name"})
4 MERGE (movie)-[:PRODUCED_BY]→(producer)
5 MERGE (movie)-[:WRITTEN_BY]→(writer)
6 RETURN movie, producer, writer;
7
```

Output:

movie	producer	writer
1 (:Movie {tagline: "Evil has its winning ways", title: "The Devil's Advocate", released: 1997})	(:Person {name: "New Producer Name"})	(:Person {name: "New Writer Name"})

Graph



3. Write a Cypher query to return the Movies with ratings more than 70 or are unrated (do not have a rating relationship).

Code:

```
1 MATCH (movie:Movie)
2 OPTIONAL MATCH (movie)←[r:REVIEWED]-(user)
3 WHERE r IS NULL OR r.rating > 70
4 RETURN movie.title, r.rating AS userRating;
5
```

Output:

movie.title	userRating
The Matrix	null
The Matrix Reloaded	null
The Matrix Revolutions	null
The Devil's Advocate	null
A Few Good Men	null
Top Gun	null
Jerry Maguire	92
Stand By Me	null
As Good as It Gets	null
What Dreams May Come	null
Snow Falling on Cedars	null
You've Got Mail	null
Sleepless in Seattle	null
Joe Versus the Volcano	null
When Harry Met Sally	null
That Thing You Do	null
The Replacements	100
RescueDawn	null
The Birdcage	null
Unforgiven	85
Johnny Mnemonic	null
Cloud Atlas	95
The Da Vinci Code	null
V for Vendetta	null
Speed Racer	null
Ninja Assassin	null
The Green Mile	null
Frost/Nixon	null

Hoffa	null
Apollo 13	null
Twister	null
Cast Away	null
One Flew Over the Cuckoo's Nest	null
Something's Gotta Give	null
Bicentennial Man	null
Charlie Wilson's War	null
The Polar Express	null
A League of Their Own	null

Terminal

TableRAW

Q

↓

movie.title	userRating
1 "The Matrix"	null
2 "The Matrix Reloaded"	null
3 "The Matrix Revolutions"	null
4 "The Devil's Advocate"	null
5 "A Few Good Men"	null
6 "Top Gun"	null
7	

Started streaming 38 records after 511ms and completed after 515ms.

4. Write Cypher query to return all people who have been a director as well as producer for at least one movie (not necessarily for the same movie; e.g., if person A directs movie X and produces movie Y, then it will be listed, X may or may not be equal to Y)

Code:

```
1 MATCH (person:Person)-[:DIRECTED]→(movieDirector:Movie)
2 MATCH (person)-[:PRODUCED]→(movieProducer:Movie)
3 WHERE ID(movieDirector) <> ID(movieProducer)
4 RETURN person.name;
5
```

Output:

person.name	
1	"Nora Ephron"
2	"Rob Reiner"
3	"Lana Wachowski"
4	"Lilly Wachowski"