

Week 9 Coding Practice

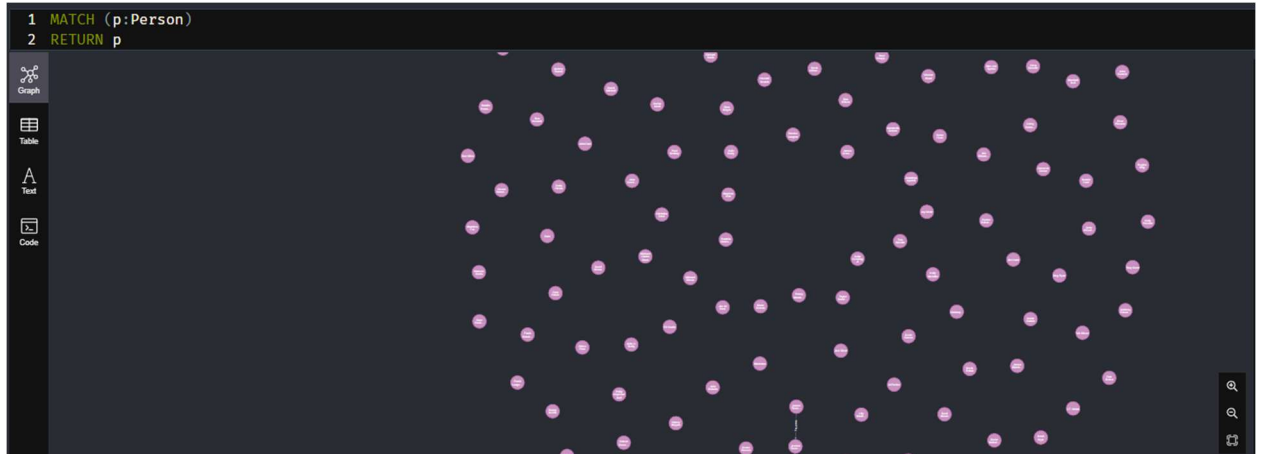
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Practice on Movie Dataset(sandbox)

1. Retrieve all Person nodes

```
MATCH (p:Person)
```

```
RETURN p
```



2. Retrieve Person nodes that have a born property value of 1970

```
MATCH (p:Person {born : 1970})
```

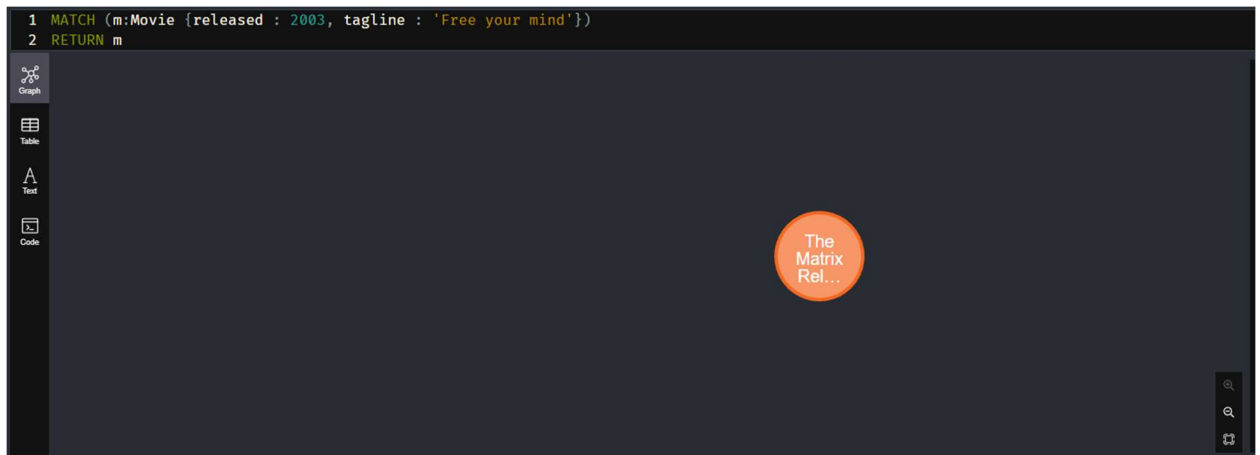
```
RETURN p
```



3. Retrieve a movie releases in 2003 and tagline "Free your mind"

```
MATCH (m:Movie {released : 2003, tagline : 'Free your mind'})
```

```
RETURN m
```



- Return property values as a table for a person born in 1965 with two columns name and year

```

MATCH (p: Person {born : 1965})
RETURN p.name, p.born

```

```

1 MATCH (p: Person {born : 1965})
2 RETURN p.name, p.born

```

	p.name	p.born
1	"Lana Wachowski"	1965
2	"Tom Tykwer"	1965
3	"John C. Reilly"	1965

Started streaming 3 records after 2 ms and completed after 4 ms

- Add aliases column headings NAME and YEAR for the query #4

```

MATCH (p:Person {born : 1965})
RETURN p.name as NAME, p.born AS YEAR

```

```

1 MATCH (p:Person {born : 1965})
2 RETURN p.name as NAME, p.born AS YEAR

```

	NAME	YEAR
1	"Lana Wachowski"	1965
2	"Tom Tykwer"	1965
3	"John C. Reilly"	1965

- Add aliases column headings NAME OF PERSON and YEAR BORN for the query #4

```

MATCH (p: Person {born: 1965})
RETURN p.name AS 'NAME OF PERSON', p.born AS 'YEAR BORN'

```

```
1 MATCH (p: Person {born: 1965})
2 RETURN p.name AS 'NAME OF PERSON', p.born AS 'YEAR BORN'
```

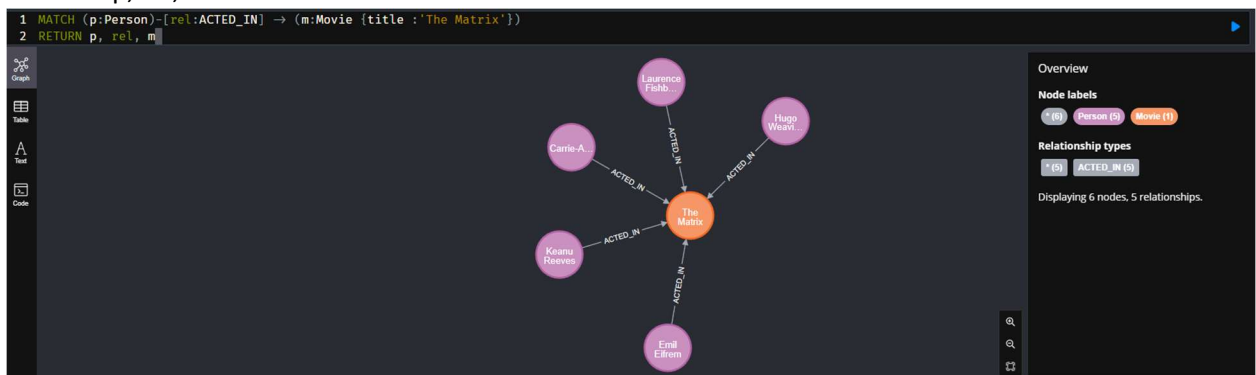
	NAME OF PERSON	YEAR BORN
1	"Lana Wachowski"	1965
2	"Tom Tykwer"	1965
3	"John C. Reilly"	1965

7. Examine relationship schema in Movie database + make a screenshot
CALL db.schema.visualization()

```
neo4j$ CALL db.schema.visualization()
```

nodes	relationships
<pre>{ "identity": -2, "labels": ["Movie"], "properties": { "name": "Movie", "indexes": ["released"], "constraints": ["Constraint(id=13, name='constraint_3044d997', type='UNIQUENESS', schema=(Movie {title}), ownedIndex=9)"] }, "elementId": "-2" }</pre>	<pre>{ "identity": -1, "start": -1, "end": -2, "type": "ACTED_IN", "properties": { }, "elementId": "-1", "startNodeElementId": "-1", "endNodeElementId": "-2" }</pre>

8. Find a person who acted in the movie "the Matrix" and return person, relation, and movie
MATCH (p:Person)-[rel:ACTED_IN] -> (m:Movie {title : 'The Matrix'})
RETURN p, rel, m



9. Retrieve all movies that are connected to Tom Hanks. Note two alternative ways of writing the same query.
MATCH (m: Movie) <-- (p:Person {name : 'Tom Hanks'})
RETURN m.title
//or
MATCH (p : Person {name : 'Tom Hanks'}) --> (m : Movie)
RETURN m.title

```

1 MATCH (p : Person {name : 'Tom Hanks'}) → (m : Movie)
2 RETURN m.title

```

	m.title
1	"Apollo 13"
2	"You've Got Mail"
3	"A League of Their Own"
4	"Joe Versus the Volcano"
5	"That Thing You Do"
6	"The Da Vinci Code"
7	

10. Return all relationships for the title "The Matrix"

```
MATCH (p : Person) – [rel] -> (m : Movie {title : 'The Matrix'})
```

```
RETURN p.name, type(rel)
```

```

1 MATCH (p : Person) – [rel] -> (m : Movie {title : 'The Matrix'})
2 RETURN p.name, type(rel)
3

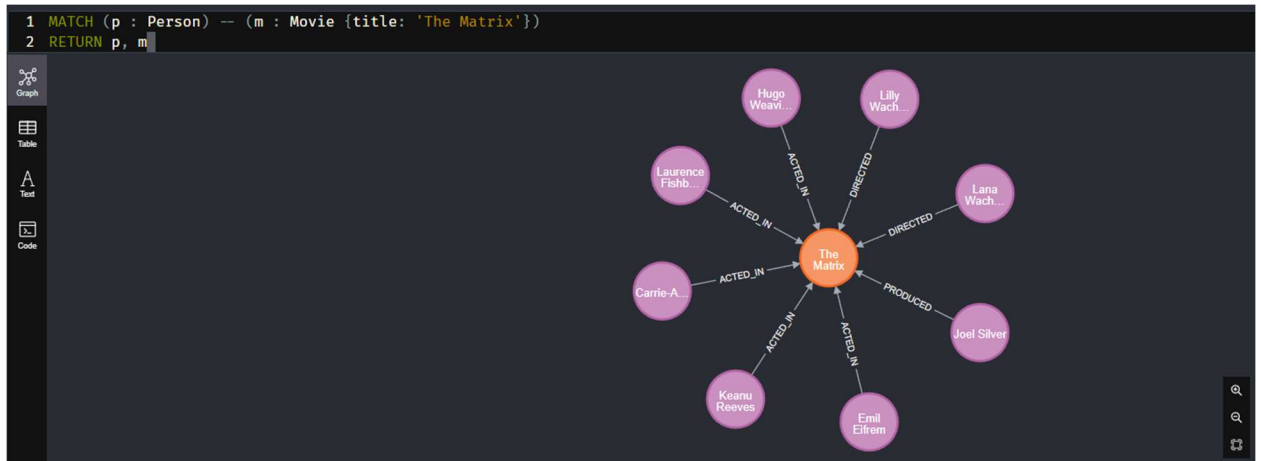
```

	p.name	type(rel)
1	"Emil Eifrem"	"ACTED_IN"
2	"Joel Silver"	"PRODUCED"
3	"Lana Wachowski"	"DIRECTED"
4	"Lilly Wachowski"	"DIRECTED"
5	"Hugo Weaving"	"ACTED_IN"
6	"Laurence Fishburne"	"ACTED_IN"
7		

11. Use anonymous relationship for the title "The Matrix"

```
MATCH (p : Person) – (m : Movie {'The Matrix'})
```

```
RETURN p, m
```



12. Find who reviewed "Cloud Atlas" and return name and rating

`MATCH (p : Person) - [r : REVIEWED] -> (m : Movie {title : 'Cloud Atlas'}) return p.name, r.rating`

```

neo4j$ MATCH (p : Person) - [r : REVIEWED] -> (m : Movie {title : 'Cloud Atlas'}) return p.name, r.rating

```

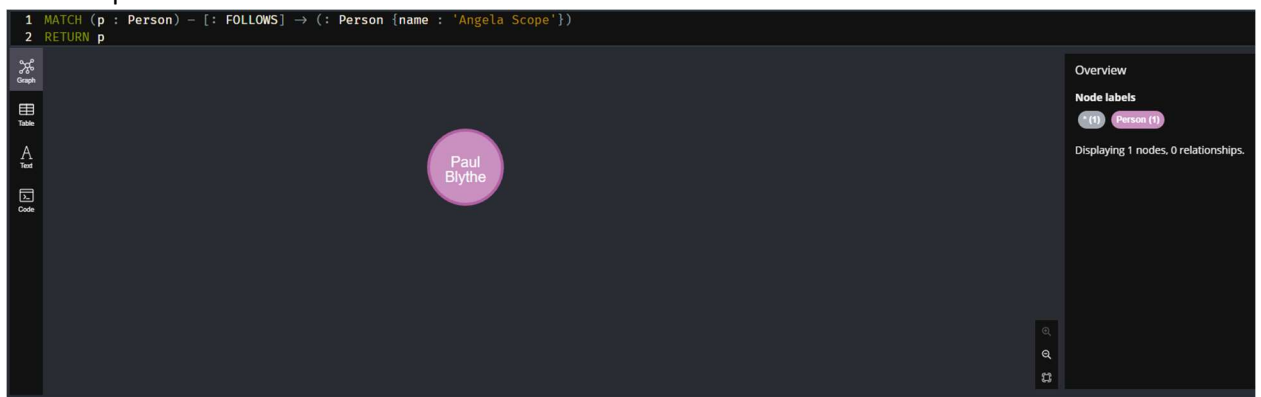
p.name	r.rating
"Jessica Thompson"	95

Started streaming 1 records after 2 ms and completed after 4 ms.

13. Find all nodes (Person) who follow Angela Scope. Note: you can leave empty variable (:Person) if you do not need to return it

`MATCH (p : Person) - [: FOLLOWS] -> (: Person {name : 'Angela Scope'})`

`RETURN p`



14. Find a person whom Angela Scope follows. Note the change of direction.

`MATCH (p : Person) <- [:FOLLOWS] - (: Person {name : 'Angela Scope'})`

`RETURN p`

1 MATCH (p : Person) ← [:FOLLOWS] - (: Person {name : 'Angela Scope'})

2 RETURN p

Graph

Table

Text

Code

Jessica Thom...

Overview

Node labels

Person (1)

Person (1)

Displaying 1 nodes, 0 relationships.