# NBD Assignment 5 – Neo4J

The assignment should be submitted as a text file with numbered queries + result files in text and image format (e.g. SVG and JSON – available export options change quite often) named resultX.svg and resultX.json (X – query number, extensions depend on available file formats, export image files where relevant). Export result files using web interface.

Run :play movie-graph command. Analyze and run sample queries.

**Build the following queries**

1. All movies

*Match(m:Movie) return m*

1. All movies in which Hugo Weaving played a role

*Match(h{name:"Hugo Weaving"}) return h*

1. Directors of movies in which Hugo Weaving played a role

*MATCH (h:Person {name:"Hugo Weaving"})-[:ACTED\_IN]->(m)<-[:DIRECTED]-(d) RETURN DISTINCT d*

1. All actors playing in the same movies as Hugo Weaving

*MATCH (h:Person {name:"Hugo Weaving"})-[:ACTED\_IN]->(m)<-[:ACTED\_IN]-(a) RETURN DISTINCT a*

1. All movies with actors starring in Matrix

*MATCH (m:Movie {title: "The Matrix"})<-[:ACTED\_IN]-(a)-[:ACTED\_IN]-> (mm) RETURN DISTINCT mm*

1. List of actors (actor = person playing in at least one movie) with amount of movies they played roles in

*MATCH (p:Person)-[:ACTED\_IN]->(m) with p,count(\*) as amount WHERE amount>1 RETURN p,amount*

1. List of people who both wrote the screenplay and directed a movie, plus titles of such movies (screenwriter===director + movie title)

*MATCH(p)-[:WROTE]->(m)<-[:DIRECTED]-(p) RETURN p,m.title*

1. List of movies in which both Hugo Weaving and Keanu Reeves played a role

*MATCH (h {name:"Hugo Weaving"})-[:ACTED\_IN]->(m)<-[:ACTED\_IN]-( k {name:"Keanu Reeves"}) RETURN m*

1. Query or set of queries that will add Captain America:The First Avenger together with adding information about director, screenwriters and actors playing main roles. Use IMDB short info version <http://www.imdb.com/title/tt0458339/> .

*CREATE (CA:Movie {title:'Captain America:The First Avenger', released:2011, tagline:'May the force be with captain'})*

*CREATE (ChrisE:Person {name:'Chris Evans', born:1981})*

*CREATE (HayleyA:Person {name:'Hayley Atwell', born:1982})*

*CREATE (SebastianS:Person {name:'Sebastian Stan', born: 1982})*

*CREATE (TommyLJ:Person {name:'Tommy Lee Jones', born:1946})*

*CREATE (Hugo:Person {name:'Hugo Weaving', born:1960})*

*CREATE (DominicC:Person {name:'Dominic Cooper', born:1978})*

*CREATE (RichardA:Person {name:'Richard Armitage', born:1971})*

*CREATE (StanleyT:Person {name:'Stanley Tucci', born:1960})*

*CREATE (SamuelLJ:Person {name:'Samuel L. Jackson', born:1948})*

*CREATE (JJ:Person {name:'Joe Johnston', born:1950})*

*CREATE (ChristopherM:Person {name:'Christopher Markus', born:1970})*

*CREATE (StephenM:Person {name:'Stephen McFeely', born:1969})*

*CREATE (JS:Person {name:'Joe Simon', born:1913})*

*CREATE (JK:Person {name:'Jack Kirby', born:1917})*

*CREATE*

*(ChrisE)-[:ACTED\_IN {roles:['Captain America']}]->(CA),*

*(HayleyA)-[:ACTED\_IN {roles:['Peggy Carter']}]->(CA),*

*(SebastianS)-[:ACTED\_IN {roles:['James Buchanan \'Bucky\' Barnes']}]->(CA),*

*(TommyLJ)-[:ACTED\_IN {roles:['Colonel Chester Phillips']}]->(CA),*

*(Hugo)-[:ACTED\_IN {roles:['Red Skull']}]->(CA),*

*(DominicC)-[:ACTED\_IN {roles:['Howard Stark']}]->(CA),*

*(RichardA)-[:ACTED\_IN {roles:['Heinz Kruger']}]->(CA),*

*(StanleyT)-[:ACTED\_IN {roles:['Dr. Abraham Erskine']}]->(CA),*

*(SamuelLJ)-[:ACTED\_IN {roles:['Nick Fury']}]->(CA),*

*(JJ)-[:DIRECTED]->(CA),*

*(ChristopherM)-[:WROTE]->(CA),*

*(StephenM)-[:WROTE]->(CA),*

*(JS)-[:WROTE]->(CA),*

*(JK)-[:WROTE]->(CA)*

1. Query that shows all information added in Query 9 (movie, actors, director, screenwriter)

*MATCH (m:Movie {title:"Captain America:The First Avenger"})-[\*1..4]-(all)*

*RETURN DISTINCT all,m*