# 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