# Assignment 4: Graph Databases

CALL apoc.load.json("file:///Sample\_Game\_3.json") YIELD value

unwind value.data as data

with data WHERE  data.type.name = "PASS"

merge (f\_p:From {id: data.from.id, name: data.from.name, ball\_time: data.end.time - data.start.time,

team: data.team.name, team\_id: data.team.id, type\_of\_play: data.type.name})

merge (t\_p:To {id: data.to.id, name: data.to.name, team: data.team.name})

merge (f\_p) - [:PASSED\_TO]->(t\_p)

CALL apoc.load.json("file:///Sample\_Game\_3.json") YIELD value

unwind value.data as data

with data WHERE  data.type.name = "SHOT"

merge (s\_p:Shooter {id: data.from.id, name: data.from.name, atrib1: data.subtypes[0].name, atrib2: data.subtypes[1].name})

**Who is the most active player?**

MATCH (n)<-[p:PASSED\_TO]-()

RETURN n, count(p) AS num

ORDER BY num desc

**Who has the most passes?**

MATCH (n)-[p:PASSED\_TO]->()

RETURN n, count(p) AS num

ORDER BY num desc

**Who has the most central role? (Ball possession)**

MATCH (n:From)

RETURN sum(n.ball\_time) AS num , n.name

ORDER BY num desc

**Who has the most attempted to score?**

MATCH (n:Shooter)

RETURN n.name

**Which team has the most ball possession**

MATCH (n:From) where n.team= "Team A"

RETURN sum(n.ball\_time) AS num

ORDER BY num desc

**Connection between two specific players**

MATCH (n)-[r]->(x) WHERE n.name="Player 11" AND x.name="Player 18"

RETURN  COUNT(r)

ORDER BY COUNT(r) DESC