1. What is the shortest path between DR. STRANGE and DR. DOOM?

MATCH p=(victor:Hero {name: 'DR. DOOM/VICTOR VON'})-[:APPEARED\*0..2]-(stephen:Hero {name: 'DR. STRANGE/STEPHEN'})

RETURN p, length(p)

ORDER BY length(p)

LIMIT 1

ANSWER: 1

2. List the 5 shortest paths between DR. STRANGE and DR. DOOM

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│"p" │"length(p)"│

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│[{"name":"DR. DOOM/VICTOR VON"│"1" │

│,"degree":"441"},{"w":"12"},{"│ │

│name":"DR. STRANGE/STEPHEN","d│ │

│egree":"777"}] │ │

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│[{"name":"DR. DOOM/VICTOR VON"│"1" │

│,"degree":"441"},{"w":"8"},{"n│ │

│ame":"DR. STRANGE/STEPHEN","de│ │

│gree":"777"}] │ │

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│[{"name":"DR. DOOM/VICTOR VON"│"2" │

│,"degree":"441"},{"w":"2"},{"n│ │

│ame":"BALDER [ASGARDIAN]","deg│ │

│ree":"224"},{"name":"BALDER [A│ │

│SGARDIAN]","degree":"224"},{"w│ │

│":"3"},{"name":"DR. STRANGE/ST│ │

│EPHEN","degree":"777"}] │ │

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│[{"name":"DR. DOOM/VICTOR VON"│"2" │

│,"degree":"441"},{"w":"10"},{"│ │

│name":"SILVER SURFER/NORRIN","│ │

│degree":"466"},{"name":"SILVER│ │

│ SURFER/NORRIN","degree":"466"│ │

│},{"w":"42"},{"name":"DR. STRA│ │

│NGE/STEPHEN","degree":"777"}] │ │

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│[{"name":"DR. DOOM/VICTOR VON"│"2" │

│,"degree":"441"},{"w":"10"},{"│ │

│name":"SILVER SURFER/NORRIN","│ │

│degree":"466"},{"name":"SILVER│ │

│ SURFER/NORRIN","degree":"466"│ │

│},{"w":"28"},{"name":"DR. STRA│ │

│NGE/STEPHEN","degree":"777"}] │ │

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3. List 5 Friends of Friends with the most connections and COLOSSUS II.

MATCH (peter:Hero { name: 'COLOSSUS II/PETER RA' })-[:APPEARED\*2..2]-(friend\_of\_friend)

WHERE NOT (peter)-[:APPEARED]-(friend\_of\_friend)

AND friend\_of\_friend.name <> 'COLOSSUS II/PETER RA'

RETURN friend\_of\_friend.name, COUNT(\*)

ORDER BY COUNT(\*) DESC , friend\_of\_friend.name

LIMIT 5

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│"friend\_of\_friend.name"│"COUNT(\*)"│

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│"WONG" │"453" │

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│"MOONSTONE II/KARLA S" │"370" │

├───────────────────────┼──────────┤

│"CARTER, PEGGY" │"367" │

├───────────────────────┼──────────┤

│"POWER MAN/ERIK JOSTE" │"350" │

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│"KINGPIN/WILSON FISK" │"342" │

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4. Visualize 10 Friends of friends for IRON MAN

MATCH (tony:Hero { name: 'IRON MAN/TONY STARK' })-[:APPEARED\*2..2]-(friend\_of\_friend)

WHERE NOT (tony)-[:APPEARED]-(friend\_of\_friend)

AND friend\_of\_friend.name <> 'IRON MAN/TONY STARK'

RETURN friend\_of\_friend

LIMIT 10

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│"friend\_of\_friend" │

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│{"name":"ROM CLONE","degree":"│

│12"} │

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│{"name":"LOCKLIN, GENERAL MER"│

│,"degree":"48"} │

├──────────────────────────────┤

│{"name":"ADAMS, CINDY","degree│

│":"39"} │

├──────────────────────────────┤

│{"name":"ROM CLONE","degree":"│

│12"} │

├──────────────────────────────┤

│{"name":"SLITHER","degree":"56│

│"} │

├──────────────────────────────┤

│{"name":"SLUG/ULYSSES X. LUGM"│

│,"degree":"38"} │

├──────────────────────────────┤

│{"name":"SCOURGE II/","degree"│

│:"30"} │

├──────────────────────────────┤

│{"name":"JACKSON, CURTISS","de│

│gree":"37"} │

├──────────────────────────────┤

│{"name":"M'DAKA","degree":"32"│

│} │

├──────────────────────────────┤

│{"name":"JACKSON, CURTISS","de│

│gree":"37"} │

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5. Per OH discussion, since we aren’t sure how to create the original “team”, I modified the team finding examples to return 10. However, in this case, there’s no point in subsequently adding from 5 to 10 because this method doesn’t track connections, and the results print out in the order that they would be added as we incremented the limit. As such, here are the top 10 (and in the original question, the graph would not be fully connected as Hulk leaves the Avengers early…hence him not even appearing in the top 10 on this list).

MATCH (tony:Hero {name:'IRON MAN/TONY STARK'}) -[e:APPEARED]-> (other) <-[f:APPEARED]- (donald:Hero {name:'THOR/DR. DONALD BLAK'})

RETURN other

ORDER BY e.w DESC, f.w DESC

LIMIT 10

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│"other" │

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│{"name":"CAPTAIN AMERICA","deg│

│ree":"1426"} │

├──────────────────────────────┤

│{"name":"SCARLET WITCH/WANDA",│

│"degree":"1004"} │

├──────────────────────────────┤

│{"name":"VISION","degree":"919│

│"} │

├──────────────────────────────┤

│{"name":"WASP/JANET VAN DYNE",│

│"degree":"778"} │

├──────────────────────────────┤

│{"name":"ANT-MAN/DR. HENRY J."│

│,"degree":"775"} │

├──────────────────────────────┤

│{"name":"WONDER MAN/SIMON WIL"│

│,"degree":"729"} │

├──────────────────────────────┤

│{"name":"HAWK","degree":"880"}│

├──────────────────────────────┤

│{"name":"IRON MAN IV/JAMES R."│

│,"degree":"338"} │

├──────────────────────────────┤

│{"name":"JARVIS, EDWIN","degre│

│e":"707"} │

├──────────────────────────────┤

│{"name":"MR. FANTASTIC/REED R"│

│,"degree":"957"} │

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