Compte rendu IDH

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M2 BBS

Q1)

```
MATCH (n)
RETURN DISTINCT labels(n) AS label, count(labels(n)) AS total
```

"label"	"total"
["Word"]	9402
["Artist"]	6
["Album"]	42
["Track"]	471
["Genre"]	5
["Person"]	200

Q2)

```
MATCH ()-[r]->()
RETURN type(r) AS type, count(*) as total;
```

"type"	"total"
"BY"	43
"PART_OF"	565
"WORD_OF"	103848
"LIKE"	4426
"IS"	10
"FOLLOW"	2940

Q3)

```
MATCH (:Artist{name:'prince'})-[]->(g:Genre)
RETURN g.name AS genre
```

"genre"
"funk"
"rock"
"pop"
"soul"

Q4)

```
MATCH (t:Track)-[:PART_OF]->(a:Album)
WITH t, COUNT(DISTINCT(a)) as nb_album, COLLECT(a.name) as albums
WHERE nb_album > 1
RETURN t.name, albums
```

"t.name"	"albums"
"The Future"	["for you","the great depression"]
"Yesterday"	["1","help"]
"We Can Work It Out"	["1","past masters volume two"]
"Ticket To Ride"	["1","help"]
"The Long And Winding Road"	["1","let it be"]
"The Ballad Of John And Yoko"	["1","past masters volume two"]
"Something"	["1","abbey road"]
"She Loves You"	["1","past masters volume one"]
"Penny Lane"	["1","magical mystery tour"]
"Paperback Writer"	["1","past masters volume two"]
"Love Me Do"	["1","past masters volume one"]
"Let It Be"	["1","let it be","past masters volume two"]

"Lady Madonna"	["1","past masters volume two"]
"I Want To Hold Your Hand"	["1","past masters volume one"]
"Hey Jude"	["1","past masters volume two"]
"Help"	["1","help"]
"Hello Goodbye"	["1","magical mystery tour"]
"Get Back"	["1","let it be","past masters volume two"]
"From Me To You"	["1","past masters volume one"]
"Eight Days A Week"	["1","beatles for sale"]
"Day Tripper"	["1","past masters volume two"]
"Come Together"	["1","abbey road","history past present and future book 1"]
"Cant Buy Me Love"	["1","a hard day s night"]
"All You Need Is Love"	["1","magical mystery tour"]
"A Hard Days Night"	["1","a hard day s night"]
"This Boy"	["free as a bird","past masters volume one"]
"Across The Universe"	["let it be","past masters volume two"]
"Xxplosive"	["2001","dr dre 2001"]
"Whats The Difference"	["2001","dr dre 2001"]
"The Watcher"	["2001","dr dre 2001"]
"The Next Episode"	["2001","dr dre 2001"]
"The Message"	["2001","dr dre 2001"]
"Still DRE"	["2001","dr dre 2001"]
"Some LA Niggaz"	["2001","dr dre 2001"]
"Murder Ink"	["2001","dr dre 2001"]
"Light Speed"	["2001","dr dre 2001"]
"Lets Get High"	["2001","dr dre 2001"]

"Housewife"	["2001","dr dre 2001"]
"Fuck You"	["2001","dr dre 2001"]
"Forgot About Dre"	["2001","dr dre 2001"]
"Education"	["2001","dr dre 2001"]
"Bitch Ass Niggaz"	["2001","dr dre 2001"]
"Big Egos"	["2001","dr dre 2001"]
"Bang Bang"	["2001","dr dre 2001"]
"Ackrite"	["2001","dr dre 2001"]
"My Name Is"	["curtains up","platinum collection 2001"]
"Busa Rhyme"	["curtains up","platinum collection 2001"]
"Turn Me Loose"	["fucking crazy","platinum collection 2001","the best of"]
"The Kids"	["fucking crazy","off the wall","off the wall"]
"Stir Crazy"	["fucking crazy","the best of"]
"Shit On You"	["fucking crazy","the best of"]
"Off The Wall"	["fucking crazy","off the wall"]
"Murder Murder"	["fucking crazy","the best of"]
"Just Dont Give A Fuck"	["fucking crazy","platinum collection 2001","the best of"]
"If I Get Locked Up Tonight"	["fucking crazy","the best of"]
"Dead Wrong"	["fucking crazy","platinum collection 2001","the best of"]
"Black Masta AseHellbound H H Remix"	["fucking crazy","the best of"]
"Who Knew"	["off the wall","off the wall"]
"Under The Influence"	["off the wall","off the wall"]
"The Way I Am"	["off the wall","off the wall","the best of"]
"The Real Slim Shady"	["off the wall","off the wall","platinum collection 2001","the best of"]

"Steve Berman"	["off the wall","off the wall"]
"Stan"	["off the wall","off the wall","the best of"]
"Remember Me"	["off the wall","off the wall"]
"Public Service Announcement 2000"	["off the wall","off the wall"]
"Paul Skit"	["off the wall","off the wall"]
"Marshall Mathers"	["off the wall","off the wall","platinum collection 2001"]
"Kim"	["off the wall","off the wall"]
"Kill You"	["off the wall","off the wall","platinum collection 2001"]
"Im Back"	["off the wall","off the wall"]
"Drug Ballad"	["off the wall","off the wall"]
"Criminal"	["off the wall","off the wall","platinum collection 2001","the best of"]
"Bitch Please II"	["off the wall","off the wall","platinum collection 2001"]
"Superfly"	["superfly","very best of curtis mayfield"]
"Someone In The Dark"	["other lyrics","invincible"]
"On The Line"	["other lyrics","invincible"]
"Elizabeth I Love You"	["other lyrics","invincible"]
"Bad Influence"	["platinum collection 2001","the best of"]

Q5)

```
MATCH (al:Album)-[:BY]->(ar:Artist)
WHERE lower(al.name) = lower(ar.name)
RETURN ar.name AS artist_name
```

"artist_name"

"prince"	

Q6)

```
MATCH (t:Track)-[]->(al:Album)-[]->(ar:Artist)
WHERE lower(t.name) = lower(al.name)
RETURN al.name AS album, ar.name AS artist
```

"album"	"artist"
"planet earth"	"prince"
"3121"	"prince"
"musicology"	"prince"
"magical mystery tour"	"beatles"
"let it be"	"beatles"
"help"	"beatles"
"free as a bird"	"beatles"
"off the wall"	"eminem"
"superfly"	"curtisMayfield"
"invincible"	"michaelJackson"
"dangerous"	"michaelJackson"
"bad"	"michaelJackson"
"thriller"	"michaelJackson"
"off the wall"	"michaelJackson"
"farewell my summer love"	"michaelJackson"

Q7)

```
MATCH (w:Word)-[]->(t:Track)-[]->(al:Album)-[]->(ar:Artist{name:'eminem'})
WITH w, count(w) as nbWord
RETURN w.name AS word, nbWord AS total
ORDER BY nbWord DESC LIMIT 10
```

"word"	"total"
"get"	1980
"im"	1550
"like"	1061
"dont"	997
"fuck"	813
"shit"	785
"know"	711
"bitch"	589
"na"	557
"cause"	557

Q8)

```
MATCH (w:Word)-[]->(t:Track)
WITH t,w, COUNT(w) AS nbWord
WHERE nbWord >= 50
RETURN t.name AS track, w.name AS word, nbWord  AS total
ORDER BY nbWord
```

"track"	"word"	"total"
"Dont Stop Til You Get Enough"	"stop"	50
"Dont Stop Til You Get Enough"	"dont"	51
"Jam"	"aint"	52
"Money Fire Island Radio Edit"	"anything"	52
"Beat It"	"beat"	53
"We Shine"	"bust"	56
"HIStory Tony Morans HIStory Lesson"	"keep"	59
"This Time Around"	"really"	65
"Miss You"	"oooh"	66

"Bad"	"bad"	67
"Miss You"	"aaah"	72
"This Time Around DM Radio Mix"	"really"	79
"Bang Bang"	"bang"	84
"Wanna Be Startin Somethin"	"yeah"	88

Q9)

```
MATCH (p:Person)-[:FOLLOW]->(p2:Person{name:'Bogota Worcestershire'})
RETURN p.name AS follower
```

"follower"
"Wilmington Holmdel"
"Vaduz Goldberg"
"Belmont Knudsen"
"Kirkpatrick Hurst"
"Middlebury Blair"
"Fairchild Borneo"
"Levi Effie"
"Granville Bialystok"
"Melanesia Lura"
"Kent Catalonia"
"Rockland Fruehauf"
"Anglican Baxter"
"Hughes Tipperary"
"Fran Sheehan"
"Rafferty Gotham"
"Asia Hebraic"
"Teflon Galilee"

"Bantu Mario"
"Masonic Borroughs"

Q10)

```
MATCH path=(w:Person{name:'Bogota Worcestershire'})-[:FOLLOW*1..3]->(h:Person{nar
RETURN nodes(path) AS nodes
```

"nodes"
[{"name":"Bogota Worcestershire"},{"name":"Caribbean Cherokee"},{"name":"Lodowick Gates"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Melanesia Lura"},{"name":"Lodowick Gates"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Granville Bialystok"},{"name":"Lesbian Granville"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Mathias Marlborough"},{"name":"Lesbian Granville"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Juliet Simla"},{"name":"Cyril McKinney"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Juliet Simla"},{"name":"McKnight Elisabeth"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Melanesia Lura"},{"name":"McKnight Elisabeth"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Mathias Marlborough"},{"name":"McKnight Elisabeth"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Newark Chesterton"},{"name":"McKnight Elisabeth"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Melanesia Lura"},{"name":"Logan Java"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Boswell Bobbie"},{"name":"Polk Dorset"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Caribbean Cherokee"},{"name":"Gaylord Zellerbach"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Boswell Bobbie"},{"name":"Mathias Marlborough"},{"name":"Hebrides Afrikaans"}]
[{"name":"Bogota Worcestershire"},{"name":"Mathias Marlborough"

```
},{"name":"Hebrides Afrikaans"}]

[{"name":"Bogota Worcestershire"},{"name":"Melanesia Lura"},{"n
ame":"Hopkins Eaton"},{"name":"Hebrides Afrikaans"}]

[{"name":"Bogota Worcestershire"},{"name":"Mathias Marlborough"
},{"name":"Murphy Oxonian"},{"name":"Hebrides Afrikaans"}]

[{"name":"Bogota Worcestershire"},{"name":"Albrecht Honshu"},{"
name":"Wilmington Holmdel"},{"name":"Hebrides Afrikaans"}]
```

Q11)

```
MATCH path=allShortestPaths((w:Person{name:'Bogota Worcestershire'})-[*]->(h:Per
RETURN nodes(path)
```

```
"nodes(path)"

[{"name":"Bogota Worcestershire"},{"name":"Mathias Marlborough"},{"nam
e":"Hebrides Afrikaans"}]
```

Q12)

```
MATCH (follower:Person)-[]->(influencor:Person)-[]->(followee:Person)
WITH influencor, COUNT(DISTINCT follower) AS nbFollower, COUNT(DISTINCT followee
WHERE nbFollower >= nbFollowee*3
RETURN influencor.name, nbFollower, nbFollowee
```

"influencor.name"	"nbFollower"	"nbFollowee"
"Calvert Levine"	15	5
"Argive Wilhelmina"	15	4
"Siegel Nanking"	19	4
"Tanaka Heuser"	18	5
"Faust Horace"	16	5
"Kitakyushu Ilona"	22	3
"Chester Wheller"	24	7
"McLeod Hilton"	17	3

"Betty Felicia"	15	5
"Knudson Tanzania"	17	3
"Reykjavik Sturbridge"	12	4
"Cameron Tuesday"	16	5
"Paleozoic Spirogyra"	14	4
"Argonne Squibb"	15	5
"Kensington Bacchus"	11	3
"Millikan Orinoco"	12	2
"Wang Pasteur"	19	2
"Whippany Simon"	17	1
"Bellamy Bertie"	24	6
"Della Trichinella"	20	2
"Coddington Kurt"	14	3
"Adlerian Durango"	20	5
"Tanaka Rhode"	12	2
"Cochran Beardsley"	12	3
"Sault Grimm"	14	4
"Lubell Jules"	14	2
"Freud Cygnus"	13	3
"Standish Pandanus"	11	2
"Claude Wyman"	18	5
"Gillespie Capricorn"	18	4
"Huffman Leonardo"	16	2
"Rwanda Pravda"	15	1
"Paleozoic Blenheim"	13	4
"Greenfield Jolla"	14	4
"Casanova Troutman"	14	4
"Wier Borealis"	17	4

"Newark Chesterton"	19	4
"Jackie Linus"	16	5
"Dionysus Orono"	6	2
"Magog Dave"	12	3
"Oxonian Balinese"	14	2
"Hanley Longfellow"	15	5
"Elizabethan Rd"	15	2
"Transylvania Elgin"	17	2
"Whittaker Madonna"	13	1
"Mahoney Motorola"	10	2
"Bragg Berlin"	14	1
"Turing Adkins"	18	2
"Minnie Brisbane"	12	2
"Waring Denver"	12	1
"Donahue Ames"	11	1
"Fedora Nora"	16	1
"Hamburg Valletta"	25	1
"Marietta Nora"	13	1
"Rayleigh Bakhtiari"	20	2
"Sepoy Alberto"	12	1

Q13)

```
MATCH (:Artist{name:'eminem'})<-[]-(:Album{name:'relapse 2009'})<-[]-(:Track)<-[
RETURN COUNT(DISTINCT w) AS nbWord
```

"nbWord"
62

Q14)

```
MATCH (p1:Person)-[]->(t:Track)<-[]-(p2:Person) WITH p1, p2, COUNT(DISTINCT t) A
WHERE nbTrack > 10 AND id(p1) < id(p2)
RETURN COUNT(*) AS total
```

"total"
136