Data loading performance:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Dataset | # of nodes | Time(sec) | # of relationships | Time (sec) | Total time |
| Crocodile | 11,631 | 2 | 180,020 | 11 | 19 |
| Squirrel | 5201 | 1 | 217,073 | 25 | 29 |
| chameleon | 2277 | 1 | 36,101 | 5 | 7 |

Query: “Returns total number of (1st,2nd ,…) order connections for a given id=777”

Neo4j CYPHER shell:

1st order: MATCH (c:chameleon {id:'777'})-[:cham\_link]-(r) RETURN count(r);

2nd order: MATCH (c:chameleon {id:'777'})-[:cham\_link]-()-[:cham\_link]-(r) RETURN count(r);

3rd order: MATCH (c:chameleon {id:'777'})-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-(r) RETURN count(r);

4th order: MATCH (c:chameleon {id:'777'})-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-(r) RETURN count(r);

5th order: MATCH (c:chameleon {id:'777'})-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-(r) RETURN count(r);

6th order: MATCH (c:chameleon {id:'777'})-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-()-[:cham\_link]-(r) RETURN count(r);

WIKI – crocodile on Aura DB

|  |  |  |  |
| --- | --- | --- | --- |
|  | Time (ms) | # of records | ERROR |
| 1st order | 68 | 5 |  |
| 2nd order | 6 | 498 |  |
| 3rd order | 114 | 925 |  |
| 4th order | 550 | 272083 |  |
| 5th order | 2376 | 5774026 |  |
| 6th order | 1489846 | 3519139382 |  |
| 7th order |  |  | The allocation of an extra 2.0 MiB would use more than the limit 250.0 MiB. Currently using 249.0 MiB. dbms.memory.transaction.total.max threshold reached |

\*\*\*Neo.TransientError.General.MemoryPoolOutOfMemoryError

WIKI – chameleon on Aura DB

|  |  |  |  |
| --- | --- | --- | --- |
|  | Time | # of records |  |
| 1st order | 87 | 18 |  |
| 2nd order | 79 | 2270 |  |
| 3rd order | 172 | 83615 |  |
| 4th order | 1889 | 6353403 |  |
| 5th order | 49073 | 358364585 |  |
| 6th order | 8730537 | 26571558902 |  |

WIKI – squirrel on Aura DB

|  |  |  |  |
| --- | --- | --- | --- |
|  | Time | # of records |  |
| 1st order | 61 | 5 |  |
| 2nd order | 5 | 64 |  |
| 3rd order | 6 | 1221 |  |
| 4th order | 20 | 56169 |  |
| 5th order | 1939 | 9303644 |  |
| 6th order | XXX |  | The allocation of an extra 2.0 MiB would use more than the limit 250.0 MiB. |