1ZL

EXPLAIN SELECT COUNT(*) FROM geochrono.Milion INNER JOIN geochrono.GeoTabela ON (mod(Milion.liczba,68)= (GeoTabela.id_pietro))
QUERY PLAN
Finalize Aggregate (cost=14664.16..14664.17 rows=1 width=8)
-> Gather (cost=14663.95..14664.16 rows=2 width=8)
Workers Planned: 2
-> Partial Aggregate (cost=13663.95..13663.96 rows=1 width=8)
-> Hash Join (cost=2.73..13262.90 rows=160417 width=0)
Hash Cond: (mod(milion.liczba, 68) = geotabela.id_pietro)
-> Parallel Seq Scan on milion (cost=0.00..9572.67 rows=416667 width=4)
-> Hash (cost=1.77..1.77 rows=77 width=4)
-> Seq Scan on geotabela (cost=0.00..1.77 rows=77 width=4)

2ZL

EXPLAIN SELECT COUNT(*) FROM geochrono.Milion INNER JOIN geochrono.GeoPietro ON (mod(Milion.liczba,68)=geochrono.GeoPietro.id_pietro) NATURAL JOIN geochrono.GeoEpoka NATURAL JOIN geochrono.GeoOkres NATURAL JOIN geochrono.GeoEra NATURAL JOIN geochrono.GeoEon
QUERY PLAN
Finalize Aggregate (cost=13912.92..13912.93 rows=1 width=8)
-> Gather (cost=13912.70..13912.91 rows=2 width=8)
Workers Planned: 2
-> Partial Aggregate (cost=12912.70..12912.71 rows=1 width=8)
-> Hash Join (cost=7.61..12511.66 rows=160417 width=0)
Hash Cond: (geoepoka.id_okres = geookres.id_okres)
-> Hash Join (cost=4.23..11250.46 rows=160417 width=4)
Hash Cond: (geopietro.id_epoka = geoepoka.id_epoka)
-> Hash Join (cost=2.73..10746.75 rows=160417 width=4)
Hash Cond: (mod(milion.liczba, 68) = geopietro.id_pietro)
-> Parallel Seq Scan on milion (cost=0.00..9572.67 rows=416667 width=4)
-> Hash (cost=1.77..1.77 rows=77 width=8)
-> Seq Scan on geopietro (cost=0.00..1.77 rows=77 width=8)
-> Hash (cost=1.22..1.22 rows=22 width=8)
-> Seq Scan on geoepoka (cost=0.00..1.22 rows=22 width=8)
-> Hash (cost=3.27..3.27 rows=9 width=4)
-> Hash Join (cost=2.09..3.27 rows=9 width=4)
Hash Cond: (geoera.id_eon = geoeon.id_eon)
-> Hash Join (cost=1.07..2.19 rows=9 width=8)
Hash Cond: (geookres.id_era = geoera.id_era)
-> Seq Scan on geookres (cost=0.00..1.09 rows=9 width=8)
-> Hash (cost=1.03..1.03 rows=3 width=8)
-> Seq Scan on geoera (cost=0.00..1.03 rows=3 width=8)
-> Hash (cost=1.01..1.01 rows=1 width=4)
-> Seq Scan on geoeon (cost=0.00..1.01 rows=1 width=4)

3ZG

EXPLAIN SELECT COUNT(*) FROM geochrono.Milion WHERE mod(Milion.liczba,68)= (SELECT id_pietro FROM geochrono.GeoTabela WHERE mod(Milion.liczba,68)=(id_pietro))
QUERY PLAN

Aggregate (cost=2175418.50..2175418.51 rows=1 width=8)
-> Seq Scan on milion (cost=0.00..2175406.00 rows=5000 width=0)
Filter: (mod(liczba, 68) = (SubPlan 1))
SubPlan 1
-> Seq Scan on geotabela (cost=0.00..2.16 rows=1 width=4)
Filter: (mod(milion.liczba, 68) = id_pietro)
JIT:
Functions: 10
Options: Inlining true, Optimization true, Expressions true, Deforming true

4ZG

-- 4ZG EXPLAIN SELECT COUNT(*) FROM geochrono.Milion WHERE mod(Milion.liczba,68) IN (SELECT GeoPietro.id_pietro FROM geochrono.GeoPietro NATURAL JOIN geochrono.GeoEpoka NATURAL JOIN geochrono.GeoOkres NATURAL JOIN geochrono.GeoEra NATURAL JOIN geochrono.GeoEon)
QUERY PLAN
Finalize Aggregate (cost=14093.33..14093.34 rows=1 width=8)
-> Gather (cost=14093.12..14093.33 rows=2 width=8)
Workers Planned: 2
-> Partial Aggregate (cost=13093.12..13093.13 rows=1 width=8)
-> Hash Semi Join (cost=8.47..12692.08 rows=160417 width=0)
Hash Cond: (mod(milion.liczba, 68) = geopietro.id_pietro)
-> Parallel Seq Scan on milion (cost=0.00..9572.67 rows=416667 width=4)
-> Hash (cost=7.50..7.50 rows=77 width=4)
-> Hash Join (cost=4.88..7.50 rows=77 width=4)
Hash Cond: (geoepoka.id_okres = geookres.id_okres)
-> Hash Join (cost=1.50..3.51 rows=77 width=8)
Hash Cond: (geopietro.id_epoka = geoepoka.id_epoka)
-> Seq Scan on geopietro (cost=0.00..1.77 rows=77 width=8)
-> Hash (cost=1.22..1.22 rows=22 width=8)
-> Seq Scan on geoepoka (cost=0.00..1.22 rows=22 width=8)
-> Hash (cost=3.27..3.27 rows=9 width=4)
-> Hash Join (cost=2.09..3.27 rows=9 width=4)
Hash Cond: (geoera.id_eon = geoeon.id_eon)
-> Hash Join (cost=1.07..2.19 rows=9 width=8)
Hash Cond: (geookres.id_era = geoera.id_era)
-> Seq Scan on geookres (cost=0.00..1.09 rows=9 width=8)
-> Hash (cost=1.03..1.03 rows=3 width=8)
-> Seq Scan on geoera (cost=0.00..1.03 rows=3 width=8)
-> Hash (cost=1.01..1.01 rows=1 width=4)
-> Seq Scan on geoeon (cost=0.00..1.01 rows=1 width=4)