Assignment 3 report 1

Team 2:

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1. Implementation

2. Explain Result

(1) A query accessing single table with WHERE

SQL > EXPLAIN SELECT d\_id FROM district WHERE d\_w\_id < 5

query-plan

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->ProjectPlan (#blks=2, #recs=10)

->SelectPlan pred:(d\_w\_id<5.0(#blks=2, #recs=10)

->TablePlan on(district)(#blks=2, #recs=10)

Actual #recs: 10

(2)A query accessing multiple tables with WHERE

SQL> EXPLAIN SELECT d\_id FROM district, warehouse WHERE d\_w\_id = w\_id

query-plan

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->ProjectPlan (#blks=22, #recs=10)

->SelectPlan pred:(d\_w\_id=w\_id(#blks=22, #recs=10)

->ProductPlan (#blks=22, #recs=10)

->TablePlan on(district)(#blks=2, #recs=10)

->TablePlan on(warehouse)(#blks=2, #recs=1)

Actual #recs: 10

(3)A query with ORDER BY

SQL> EXPLAIN SELECT d\_id,d\_name FROM district ORDER BY d\_id DESC

query-plan

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->SortPlan (#blks=1, #recs=10)

->ProjectPlan (#blks=2, #recs=10)

->SelectPlan pred:((#blks=2, #recs=10)

->TablePlan on(district)(#blks=2, #recs=10)

Actual #recs: 10

(4)A query with GROUP BY and at least one aggregation function (MIN, MAX, COUNT, AVG... etc.)

SQL> EXPLAIN SELECT COUNT(d\_id) FROM district GROUP BY d\_city

query-plan

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->ProjectPlan (#blks=1, #recs=10)

->GroupByPlan (#blks=1, #recs=10)

->SortPlan (#blks=1, #recs=10)

->SelectPlan pred:((#blks=2, #recs=10)

->TablePlan on(district)(#blks=2, #recs=10)

Actual #recs: 10