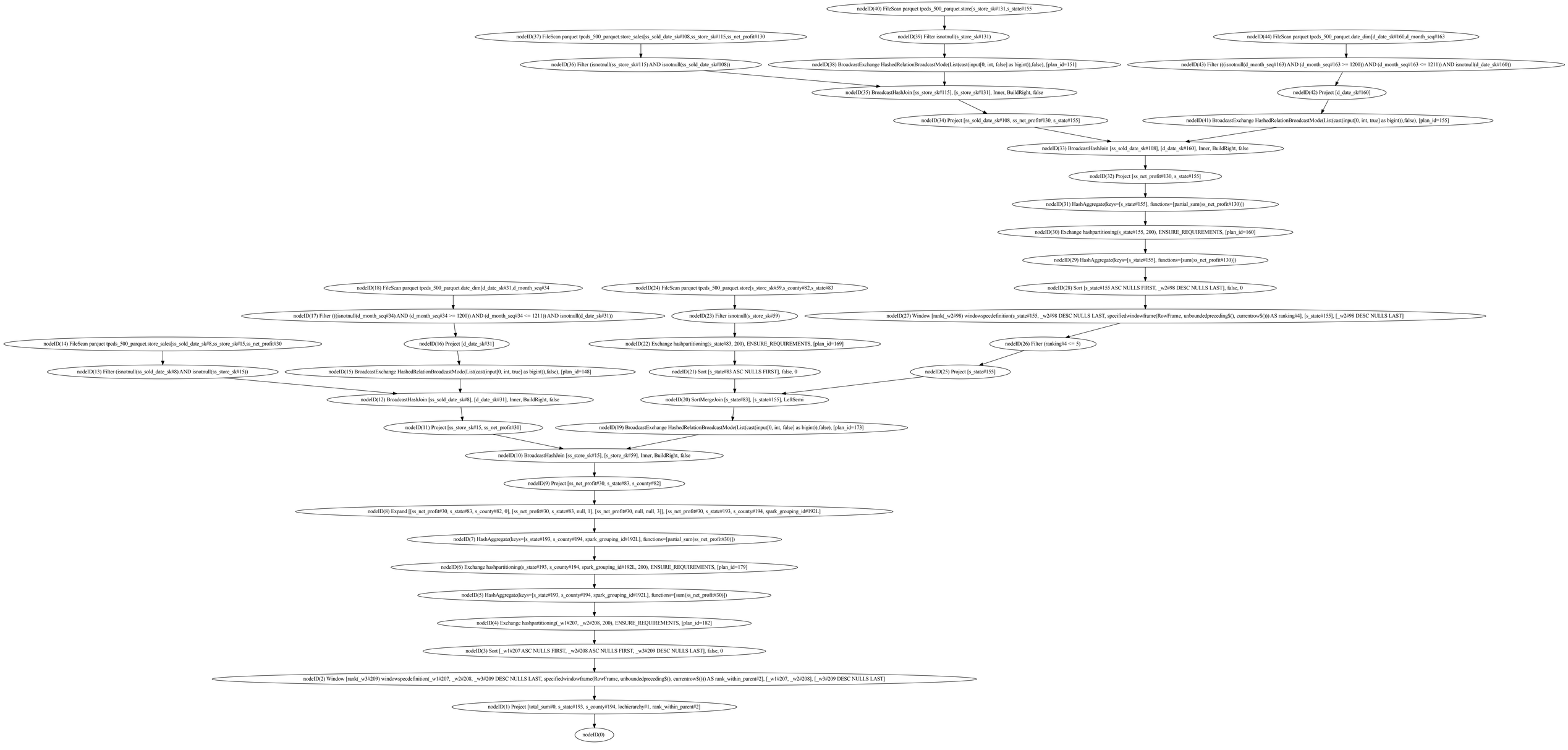
nodeID(40) FileScan parquet tpcds_500_parquet.store[s_store_sk#131,s_state#155
nodeID(37) FileScan parquet tpcds_500_parquet.store_sales[ss_sold_date_sk#108,ss_store_sk#115,ss_net_profit#130
nodeID(39) Filter isnotnull(s_store_sk#131)
nodeID(44) FileScan parquet tpcds_500_parquet.date_dim[d_date_sk#160,d_month_seq#163
nodeID(36) Filter (isnotnull(ss_store_sk#115) AND isnotnull(ss_sold_date_sk#108))
nodeID(38) BroadcastExchange HashedRelationBroadcastMode(List(cast(input[0, int, false] as bigint)),false), [plan_id=151]
nodeID(43) Filter (((isnotnull(d_month_seq#163) AND (d_month_seq#163 >= 1200)) AND (d_month_seq#163 <= 1211)) AND isnotnull(d_date_sk#160))
nodeID(35) BroadcastHashJoin [ss_store_sk#115], [s_store_sk#131], Inner, BuildRight, false
nodeID(42) Project [d_date_sk#160]
nodeID(34) Project [ss_sold_date_sk#108, ss_net_profit#130, s_state#155]
nodeID(41) BroadcastExchange HashedRelationBroadcastMode(List(cast(input[0, int, true] as bigint)),false), [plan_id=155]
nodeID(33) BroadcastHashJoin [ss_sold_date_sk#108], [d_date_sk#160], Inner, BuildRight, false
nodeID(32) Project [ss_net_profit#130, s_state#155]
nodeID(31) HashAggregate(keys=[s_state#155], functions=[partial_sum(ss_net_profit#130)])
nodeID(30) Exchange hashpartitioning(s_state#155, 200), ENSURE_REQUIREMENTS, [plan_id=160]
nodeID(29) HashAggregate(keys=[s_state#155], functions=[sum(ss_net_profit#130)])
nodeID(18) FileScan parquet tpcds_500_parquet.date_dim[d_date_sk#31,d_month_seq#34
nodeID(24) FileScan parquet tpcds_500_parquet.store[s_store_sk#59,s_county#82,s_state#83
nodeID(28) Sort [s_state#155 ASC NULLS FIRST, _w2#98 DESC NULLS LAST], false, 0
nodeID(17) Filter (((isnotnull(d_month_seq#34) AND (d_month_seq#34 >= 1200)) AND (d_month_seq#34 <= 1211)) AND isnotnull(d_date_sk#31))
nodeID(23) Filter isnotnull(s_store_sk#59)
nodeID(27) Window [rank(_w2#98) windowspecdefinition(s_state#155, _w2#98 DESC NULLS LAST, specifiedwindowframe(RowFrame, unboundedpreceding$(), currentrow$())) AS ranking#4], [s_state#155], [_w2#98 DESC NULLS LAST]
nodeID(14) FileScan parquet tpcds_500_parquet.store_sales[ss_sold_date_sk#8,ss_store_sk#15,ss_net_profit#30
nodeID(16) Project [d_date_sk#31]
nodeID(22) Exchange hashpartitioning(s_state#83, 200), ENSURE_REQUIREMENTS, [plan_id=169]
nodeID(26) Filter (ranking#4 <= 5)
nodeID(13) Filter (isnotnull(ss_sold_date_sk#8) AND isnotnull(ss_store_sk#15))
nodeID(15) BroadcastExchange HashedRelationBroadcastMode(List(cast(input[0, int, true] as bigint)),false), [plan_id=148]
nodeID(21) Sort [s_state#83 ASC NULLS FIRST], false, 0
nodeID(25) Project [s_state#155]
nodeID(12) BroadcastHashJoin [ss_sold_date_sk#8], [d_date_sk#31], Inner, BuildRight, false
nodeID(20) SortMergeJoin [s_state#83], [s_state#155], LeftSemi
nodeID(11) Project [ss_store_sk#15, ss_net_profit#30]
nodeID(19) BroadcastExchange HashedRelationBroadcastMode(List(cast(input[0, int, false] as bigint)),false), [plan_id=173]
nodeID(10) BroadcastHashJoin [ss_store_sk#15], [s_store_sk#59], Inner, BuildRight, false
nodeID(9) Project [ss_net_profit#30, s_state#83, s_county#82]
nodeID(8) Expand [[ss_net_profit#30, s_state#83, s_county#82, 0], [ss_net_profit#30, s_state#83, null, 1], [ss_net_profit#30, null, null, 3]], [ss_net_profit#30, s_state#193, s_county#194, spark_grouping_id#192L]
nodeID(7) HashAggregate(keys=[s_state#193, s_county#194, spark_grouping_id#192L], functions=[partial_sum(ss_net_profit#30)])
nodeID(6) Exchange hashpartitioning(s_state#193, s_county#194, spark_grouping_id#192L, 200), ENSURE_REQUIREMENTS, [plan_id=179]
nodeID(5) HashAggregate(keys=[s_state#193, s_county#194, spark_grouping_id#192L], functions=[sum(ss_net_profit#30)])
nodeID(4) Exchange hashpartitioning(_w1#207, _w2#208, 200), ENSURE_REQUIREMENTS, [plan_id=182]
nodeID(3) Sort [_w1#207 ASC NULLS FIRST, _w2#208 ASC NULLS FIRST, _w3#209 DESC NULLS LAST], false, 0
nodeID(2) Window [rank(_w3#209) windowspecdefinition(_w1#207, _w2#208, _w3#209 DESC NULLS LAST, specifiedwindowframe(RowFrame, unboundedpreceding$(), currentrow$())) AS rank_within_parent#2], [_w1#207, _w2#208], [_w3#209 DESC NULLS LAST]
nodeID(1) Project [total_sum#0, s_state#193, s_county#194, lochierarchy#1, rank_within_parent#2]
nodeID(0)