nodeID(20) FileScan parquet tpcds_500_parquet.date_dim[d_date_sk#27,d_month_seq#30,d_year#33,d_moy#35,d_qoy#37
$nodelD(19) Filter (((isnotnull(d_month_seq#30) AND (d_month_seq#30 >= 1200)) AND (d_month_seq#30 <= 1211)) AND isnotnull(d_date_sk#27))$
nodeID(16) FileScan parquet tpcds_500_parquet.store_sates[ss_sold_date_sk#4.ss_item_sk#6,ss_store_sk#11,ss_quantity#14,ss_sates_price#17 nodeID(18) Project [d_date_sk#2, d_year#33, d_moy#35, d_qoy#37]
nodeID(15) Filter ((isnotutull(ss_store_sk#11)) AND isnotutull(ss_store_sk#11)) AND isnotutull(ss_store_sk#5.5,s_store_id#56) nodeID(23) FileScan parquet tpcds_500_parquet.store[s_store_sk#5.5,s_store_id#56)
nodeID(14) BroadcastHashJoin [ss_sold_date_sk#47], Inner, BuildRight, false
nodeIIX[13] Project [ss_item_sk#6, ss_store_sk#11, ss_quantity#14, ss_sales_price#17, d_vear#33, d_moy#35, d_qoy#37] nodeIIX[26] FileScan parquet tpcds_500_parquet.item[i_item_sk#84_i_brand#92_i_class#94_i_category#96,i_product_name#105
nodeITV(2) Readcast Bablioin (s. store sk#1) [s. store sk#55] Inner BuildRight false
INVELDED DEGREGATION IS SOUT SECTOR, MILE, DURINGER, TABLE
nodelD(11) Project [ss_item_sk#6, ss_quantity#14, ss_sales_price#17, d_year#33, d_noy#35, s_store_id#56] nodelD(24) BroadcastExchange HashedRelationBroadcastMode(List(cast(input[0, int, false] as bigmi)), false), [plan_id=101]
nodeID(10) BroadcastHashJoin [ss_item_sk#84], Inner, BuildRight, false
nodeID(9) Project [ss_quantity#14, ss_sales_price#17, i_category#96, i_class#94, i_brand#92, i_product_name#105, d_var#33, d_qoy#37, d_moy#35, s_store_id#56]
nodelD(8) Expand [] s.g. quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, 0], [ss_ quantity#14, ss_sales_price#17, i_ category#96, i_ class#94, i_ brand#92, i_ product_name#105, d_ year#33, d_ qoy#37, d_ moy#35, s. store_id#50, i_ product_name#105, d_ year
nodeID(7) HashAggregate(keys=[i_category#120, i_class#121, i_brand#122, i_product_name#123, d_year#124, d_qoy#125, d_moy#126, s_store_id#127, spark_grouping_id#1191.], functions=[partial_sum(coalesce((s_s_ales_price#17 * cast(s_quantity#14 as double)), 0.0))])
nodeID(6) Exchange hashpartitioning(i_category#120, i_class#121, i_brand#122, i_product_name#123, d_year#124, d_qoy#125, d_moy#126, s_store_id#127, spark_grouping_id#119L, 200), ENSURE_REQUIREMENTS, [plan_id=107]
nodeID(5) HashAggregate(keys=fi_category#120, i_class#121, i_brand#122, i_product_name#123, d_year#124, d_qoy#125, d_moy#126, s_store_id#127, spark_grouping_id#19L1, functions=fsum(coalesce((ss_sales_price#17 * cast(ss_quantity#14 as double)), 0.0))])
nodeID(4) Exchange hashpartitioning(i_category#120, 200), ENSURE_REQUIREMENTS, [plan_id=110]
nodeID(3) Sort [i_category#120 ASC NULLS FIRST, sumsales#0 DESC NULLS LAST], false, 0
nodeID(2) Window [rank(sumsales#0) windowspeedefinition(i_category#120, sumsales#0 DESC NULLS LAST; specifiedwindow/rame(RowFrame, unboundedpreceding\$(), currentrow\$())) AS rk#1], [i_category#120], [sumsales#0 DESC NULLS LAST]
$\frac{1}{\operatorname{nodelD}(1)\operatorname{Filter}(rk^{\mu})} < -100)$
$\operatorname{nodelD}(0)$