nodeID(19) FileScan parquet tpcds\_100\_parquet.item[i\_item\_sk#2,i\_brand#10,i\_class#12,i\_category#14,i\_manufact\_id#15] nodeID(18) Filter ((((i\_category#14 IN (Books, Children, Electronics) AND i\_class#12 IN (personal, portable, reference, self-help)) AND i\_class#12 IN (personal, portable, portable, portable, portable, portable, portable, portable, portable, portabl nodeID(17) Project [i\_item\_sk#2, i\_manufact\_id#15] nodeID(21) FileScan parquet tpcds\_100\_parquet.store\_sales[ss\_sold\_date\_sk#24,ss\_item\_sk#26,ss\_store\_sk#31,ss\_sales\_price#37] nodeID(25) FileScan parquet tpcds\_100\_parquet.date\_dim[d\_date\_sk#47,d\_month\_seq#50,d\_qoy#57] nodeID(16) BroadcastExchange HashedRelationBroadcastMode(List(cast(input[0, int, true] as bigint)),false), [plan\_id=93] nodeID(24) Filter (d\_month\_seq#50 INSET 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211 AND isnotnull(d\_date\_sk#47)) nodeID(20) Filter ((isnotnull(ss\_item\_sk#26) AND isnotnull(ss\_sold\_date\_sk#24)) AND isnotnull(ss\_store\_sk#31)) nodeID(23) Project [d\_date\_sk#47, d\_qoy#57] nodeID(15) BroadcastHashJoin [i\_item\_sk#2], [ss\_item\_sk#26], Inner, BuildLeft, false nodeID(22) BroadcastExchange HashedRelationBroadcastMode(List(cast(input[0, int, true] as bigint)),false), [plan\_id=97] nodeID(14) Project [i\_manufact\_id#15, ss\_sold\_date\_sk#24, ss\_store\_sk#31, ss\_sales\_price#37] nodeID(28) FileScan parquet tpcds\_100\_parquet.store[s\_store\_sk#75] nodeID(27) Filter isnotnull(s\_store\_sk#75) nodeID(13) BroadcastHashJoin [ss\_sold\_date\_sk#24], [d\_date\_sk#47], Inner, BuildRight, false nodeID(26) BroadcastExchange HashedRelationBroadcastMode(List(cast(input[0, int, false] as bigint)),false), [plan\_id=101] nodeID(12) Project [i\_manufact\_id#15, ss\_store\_sk#31, ss\_sales\_price#37, d\_qoy#57] nodeID(11) BroadcastHashJoin [ss\_store\_sk#31], [s\_store\_sk#75], Inner, BuildRight, false nodeID(10) Project [i\_manufact\_id#15, ss\_sales\_price#37, d\_qoy#57] nodeID(9) HashAggregate(keys=[i\_manufact\_id#15, d\_qoy#57], functions=[partial\_sum(ss\_sales\_price#37)]) nodeID(8) Exchange hashpartitioning(i\_manufact\_id#15, d\_qoy#57, 200), ENSURE\_REQUIREMENTS, [plan\_id=106] nodeID(7) HashAggregate(keys=[i\_manufact\_id#15, d\_qoy#57], functions=[sum(ss\_sales\_price#37)]) nodeID(6) Exchange hashpartitioning(i\_manufact\_id#15, 200), ENSURE\_REQUIREMENTS, [plan\_id=109] nodeID(5) Sort [i\_manufact\_id#15 ASC NULLS FIRST], false, 0 nodeID(4) Window [avg(\_w0#111) windowspecdefinition(i\_manufact\_id#15, specifiedwindowframe(RowFrame, unboundedpreceding\$(), unboundedfollowing\$())) AS avg\_quarterly\_sales#1], [i\_manufact\_id#15] nodeID(3) Filter CASE WHEN (avg\_quarterly\_sales#1 > 0.0) THEN ((abs((sum\_sales#0 - avg\_quarterly\_sales#1)) / avg\_quarterly\_sales#1) > 0.1) ELSE false END nodeID(2) Project [i\_manufact\_id#15, sum\_sales#0, avg\_quarterly\_sales#1] nodeID(1) TakeOrderedAndProject(limit=100, orderBy=[avg\_quarterly\_sales#1 ASC NULLS FIRST,sum\_sales#0 ASC NULLS FIRST,i\_manufact\_id#15 ASC NULLS FIRST], output=[i\_manufact\_id#15,sum\_sales#0,avg\_quarterly\_sales#1])