

Broadcast stage(end\_node\_id 16): item,10000FileScan->Filter->BroadcastExchange

Broadcast stage(end\_node\_id 19): date\_dim,10000FileScan->Filter->Project->BroadcastExchange

First stage (end\_node\_id 8): File Scan store\_sales,9130.4FileScan->Filter->BroadcastHashJoin->Project->BroadcastHashJoin->Project->HashAggregate->ExchangeHashpartitioning

NormalStage (end\_node\_id 6): length of beginNodesToChains is 1  
[1,0,0,1,0,0,0,0]  
Chain 0 is : HashAggregate(keys=[i\_item\_id#26, i\_item\_desc#29, i\_category#37, i\_class#35, i\_current\_price#30], functions=[sum(ss\_ext\_sales\_price#17)])  
HashAggregate->ExchangeHashpartitioning

NormalStage (end\_node\_id 0): length of beginNodesToChains is 1  
[1,0,2,0,2,0,0,0]  
Chain 0 is : Sort [i\_class#35 ASC NULLS FIRST], false, 0  
Sort->Empty->Project->Empty->Sort->Project