true|10|100|1000|10000|4.0|20.0|2.2222|1969-12-31 15:59:58.174|1970-01-01 00:00:00|hello|hello|k1:v1,k2:v2|100,200|{10, "foo"}

true|20|200|2000|20000|8.0|40.0|4.2222|1970-12-31 15:59:58.174|1971-01-01 00:00:00|||k3:v3,k4:v4|200,300|{20, "bar"}

set hive.stats.fetch.column.stats=true;

create table if not exists alltypes (

bo1 boolean,

ti1 tinyint,

si1 smallint,

i1 int,

bi1 bigint,

f1 float,

d1 double,

de1 decimal,

ts1 timestamp,

da1 timestamp,

s1 string,

vc1 varchar(5),

m1 map<string, string>,

l1 array<int>,

st1 struct<c1:int, c2:string>

) row format delimited fields terminated by '|'

collection items terminated by ','

map keys terminated by ':' stored as textfile;

create table alltypes\_orc like alltypes;

alter table alltypes\_orc set fileformat orc;

load data local inpath '../../data/files/alltypes.txt' overwrite into table alltypes;

insert overwrite table alltypes\_orc select \* from alltypes;

-- basicStatState: COMPLETE colStatState: NONE numRows: 2 rawDataSize: 1514

explain extended select \* from alltypes\_orc;

-- statistics for complex types are not supported yet

analyze table alltypes\_orc compute statistics for columns bo1, ti1, si1, i1, bi1, f1, d1, s1, vc1;

-- numRows: 2 rawDataSize: 1514

explain extended select \* from alltypes\_orc;

-- numRows: 2 rawDataSize: 8

explain extended select bo1 from alltypes\_orc;

-- col alias renaming

-- numRows: 2 rawDataSize: 8

explain extended select i1 as int1 from alltypes\_orc;

-- numRows: 2 rawDataSize: 174

explain extended select s1 from alltypes\_orc;

-- column statistics for complex types unsupported and so statistics will not be updated

-- numRows: 2 rawDataSize: 1514

explain extended select m1 from alltypes\_orc;

-- numRows: 2 rawDataSize: 246

explain extended select bo1, ti1, si1, i1, bi1, f1, d1,s1 from alltypes\_orc;

-- numRows: 2 rawDataSize: 0

explain extended select null from alltypes\_orc;

-- numRows: 2 rawDataSize: 8

explain extended select 11 from alltypes\_orc;

-- numRows: 2 rawDataSize: 16

explain extended select 11L from alltypes\_orc;

-- numRows: 2 rawDataSize: 16

explain extended select 11.0 from alltypes\_orc;

-- numRows: 2 rawDataSize: 178

explain extended select "hello" from alltypes\_orc;

explain extended select cast("hello" as char(5)) from alltypes\_orc;

explain extended select cast("hello" as varchar(5)) from alltypes\_orc;

-- numRows: 2 rawDataSize: 96

explain extended select unbase64("0xe23") from alltypes\_orc;

-- numRows: 2 rawDataSize: 16

explain extended select cast("1" as TINYINT), cast("20" as SMALLINT) from alltypes\_orc;

-- numRows: 2 rawDataSize: 80

explain extended select cast("1970-12-31 15:59:58.174" as TIMESTAMP) from alltypes\_orc;

-- numRows: 2 rawDataSize: 112

explain extended select cast("1970-12-31 15:59:58.174" as DATE) from alltypes\_orc;

-- numRows: 2 rawDataSize: 224

explain extended select cast("58.174" as DECIMAL) from alltypes\_orc;

-- numRows: 2 rawDataSize: 112

explain extended select array(1,2,3) from alltypes\_orc;

-- numRows: 2 rawDataSize: 1508

explain extended select str\_to\_map("a=1 b=2 c=3", " ", "=") from alltypes\_orc;

-- numRows: 2 rawDataSize: 112

explain extended select NAMED\_STRUCT("a", 11, "b", 11) from alltypes\_orc;

-- numRows: 2 rawDataSize: 250

explain extended select CREATE\_UNION(0, "hello") from alltypes\_orc;

-- COUNT(\*) is projected as new column. It is not projected as GenericUDF and so datasize estimate will be based on number of rows

-- numRows: 1 rawDataSize: 8

explain extended select count(\*) from alltypes\_orc;

-- COUNT(1) is projected as new column. It is not projected as GenericUDF and so datasize estimate will be based on number of rows

-- numRows: 1 rawDataSize: 8

explain extended select count(1) from alltypes\_orc;

-- column statistics for complex column types will be missing. data size will be calculated from available column statistics

-- numRows: 2 rawDataSize: 254

explain extended select \*,11 from alltypes\_orc;

-- subquery selects

-- inner select - numRows: 2 rawDataSize: 8

-- outer select - numRows: 2 rawDataSize: 8

explain extended select i1 from (select i1 from alltypes\_orc limit 10) temp;

-- inner select - numRows: 2 rawDataSize: 16

-- outer select - numRows: 2 rawDataSize: 8

explain extended select i1 from (select i1,11 from alltypes\_orc limit 10) temp;

-- inner select - numRows: 2 rawDataSize: 16

-- outer select - numRows: 2 rawDataSize: 186

explain extended select i1,"hello" from (select i1,11 from alltypes\_orc limit 10) temp;

-- inner select - numRows: 2 rawDataSize: 24

-- outer select - numRows: 2 rawDataSize: 16

explain extended select x from (select i1,11.0 as x from alltypes\_orc limit 10) temp;

-- inner select - numRows: 2 rawDataSize: 104

-- outer select - numRows: 2 rawDataSize: 186

explain extended select x,"hello" from (select i1 as x, unbase64("0xe23") as ub from alltypes\_orc limit 10) temp;

-- inner select - numRows: 2 rawDataSize: 186

-- middle select - numRows: 2 rawDataSize: 178

-- outer select - numRows: 2 rawDataSize: 194

explain extended select h, 11.0 from (select hell as h from (select i1, "hello" as hell from alltypes\_orc limit 10) in1 limit 10) in2;

-- This test is for FILTER operator where filter expression is a boolean column

-- numRows: 2 rawDataSize: 8

explain extended select bo1 from alltypes\_orc where bo1;

-- numRows: 0 rawDataSize: 0

explain extended select bo1 from alltypes\_orc where !bo1;