

Ticket Hash:		8f157e8010b22af03cb95f6e4f070fb4ccc07fcf	
Title:		Heap Buffer Overflow in multiSelectOrderBy	
Status:	Fixed	Type:	Code_Defect
Severity:	Minor	Priority:	Low
Subsystem:	Unknown	Resolution:	Fixed
Last Modified:		2020-06-15 13:56:11	
Version Found In:			
User Comments:			
<p>yongheng added on 2020-06-14 20:14:12:</p> <p>Affect at least trunk and 3.32 release version.</p> <p>POC:</p> <pre>--- CREATE TABLE a(b); CREATE VIEW c(d) AS SELECT b FROM a ORDER BY b; SELECT sum(d) OVER(PARTITION BY(SELECT 0 FROM c JOIN a WHERE b =(SELECT b INTERSECT SELECT d FROM c) AND b = 123)) FROM c; ---</pre>			
<p>drh added on 2020-06-15 13:56:11:</p> <p>Simplified test case that does not involve window functions:</p> <pre>CREATE TABLE t1(c1); INSERT INTO t1 VALUES(12),(123),(1234),(NULL),('abc'); CREATE TABLE t2(c2); INSERT INTO t2 VALUES(44),(55),(123); CREATE TABLE t3(c3,c4); INSERT INTO t3 VALUES(66,1),(123,2),(77,3); CREATE VIEW t5 AS SELECT c3 FROM t3 ORDER BY c4; SELECT * FROM t1, t2 WHERE c1=(SELECT 123 INTERSECT SELECT c2 FROM t5) AND c1=123;</pre> <p>Problem first appeared in the 3.25.0 release on 2018-09-15 and seems to have been caused by the new use of transitive properties for constant propagation - the optimization identified as "3c" in the change log</p>			