table

chunk 1 (actual values)

colA VC\<int\>	colB VC\<float\>	colC VC\<str\>
1	3.1	
2	5.6	
5	2.1	
62	77.8	...
1	4.22	
5	1.0	
2	4.1	

position (virtual): 0 1 2 3 4 5 6

values
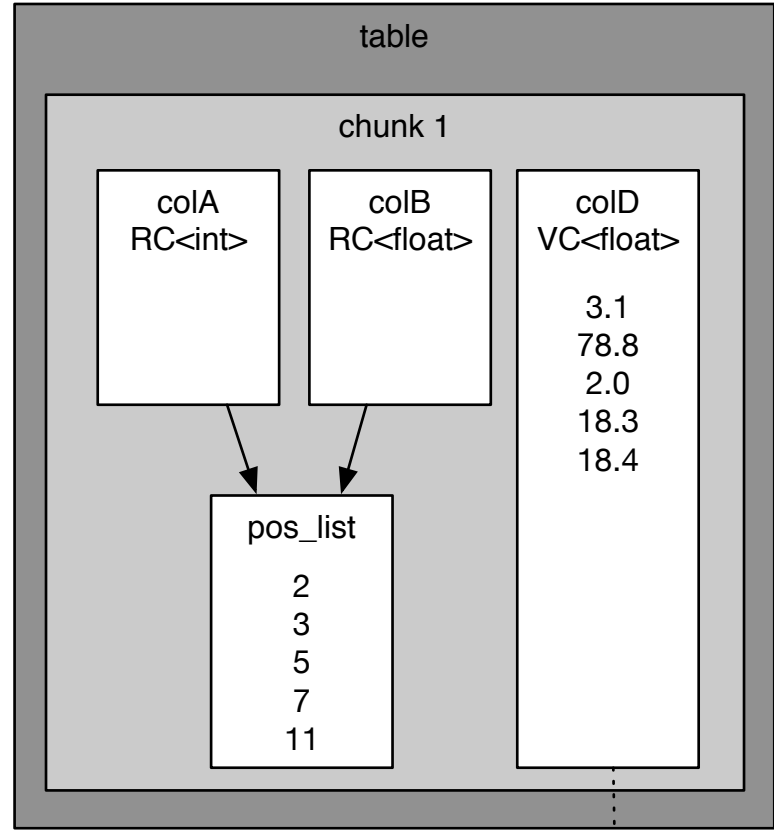
VC: value_column
DC: dictionary_column
RC: reference_column

chunk 2 (dict-compressed)

colA DC\<int\>	colB DC\<float\>	colC DC\<str\>
1	0	
0	1	
2	0	...
1	17.3	
5	0.1	
3	11.0	

dictionary / value-ids

position: 7 8 9

chunk 3 (actual values, "delta")

colA VC\<int\>	colB VC\<float\>	colC VC\<str\>
3	4.7	
5	17.4	
2	8.8	...
1	3.2	
insert below		

position: 10 11 12 13

table_scan(.., "colA", ">=", 5)

table / chunk 1

colA RC\<int\>	colB RC\<float\>	colC RC\<str\>

shared_ptr

pos_list
2
3
5
7
11

projection(colA, colB)

table / chunk 1

colA RC\<int\>	colB RC\<float\>

shared_ptr

pos_list
2
3
5
7
11

new colD: colB+1

table / chunk 1

colA RC\<int\>	colB RC\<float\>	colD VC\<float\>
		3.1
		78.8
		2.0
		18.3
		18.4
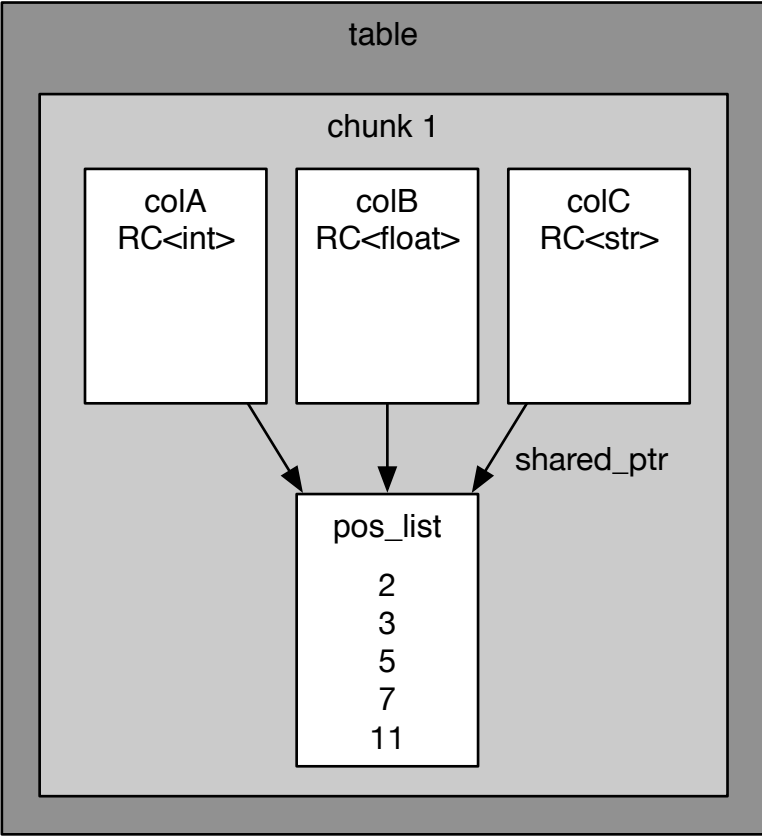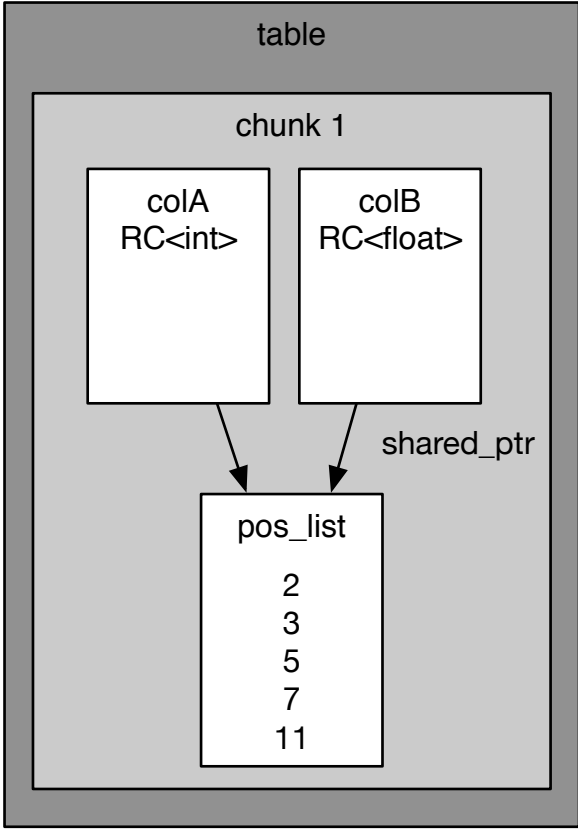
pos_list
2
3
5
7
11
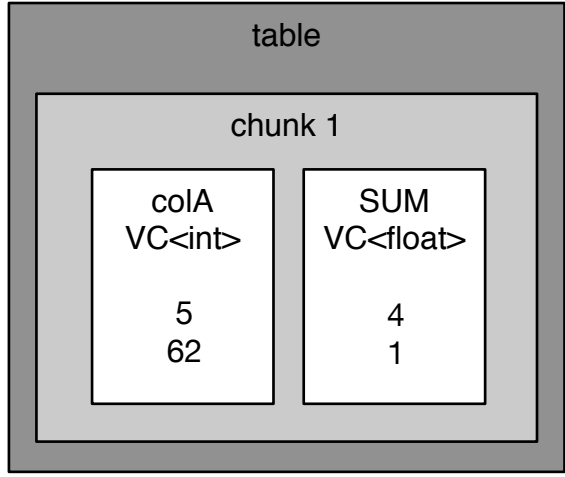
In the current model, this value column could potentially hold more entries than the regular max size of a chunk

COUNT(colB) GROUP BY colA

table / chunk 1

colA VC\<int\>	SUM VC\<float\>
5	4
62	1

TODO: add max size of pos_lists and potentially multiple chunks