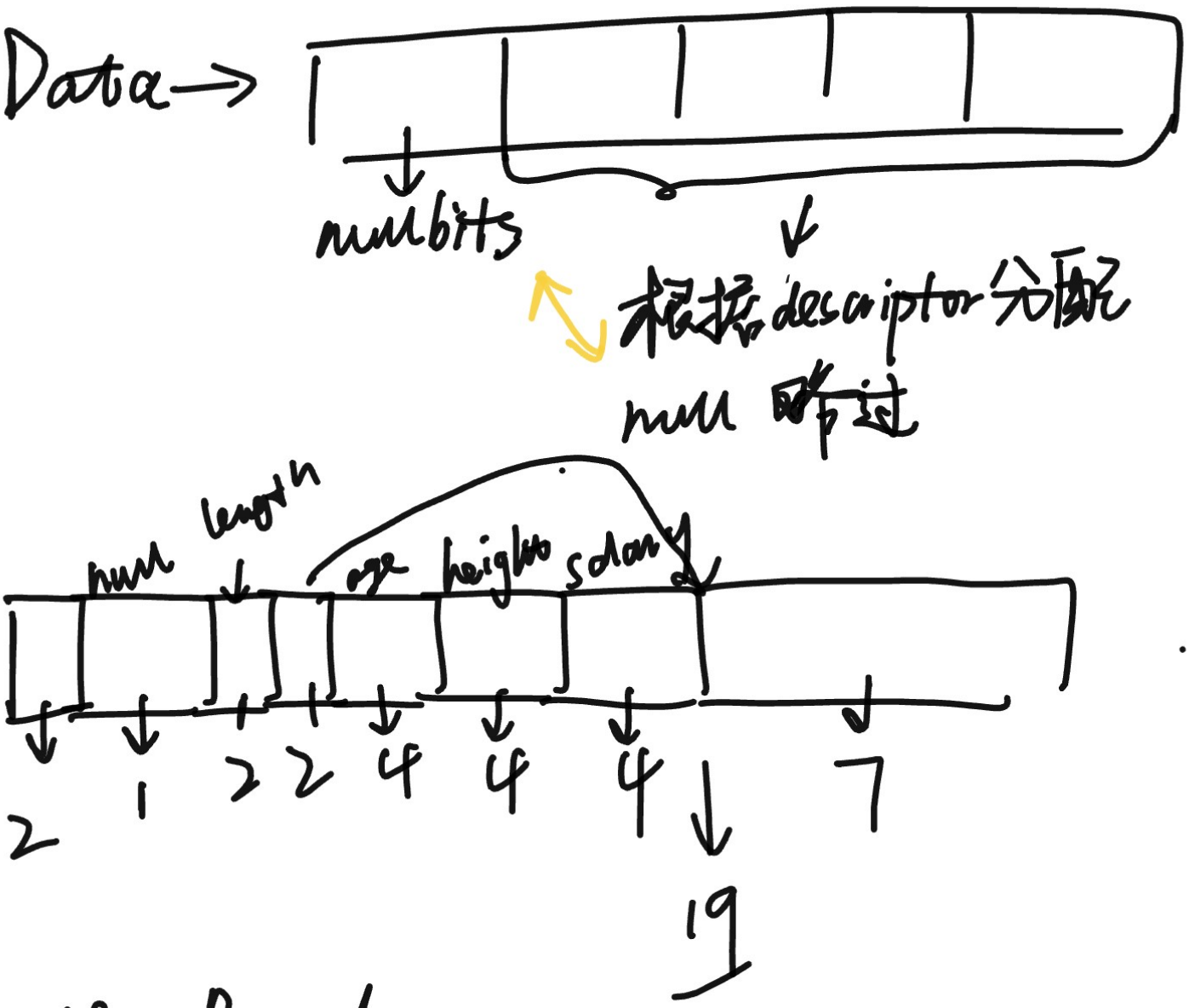
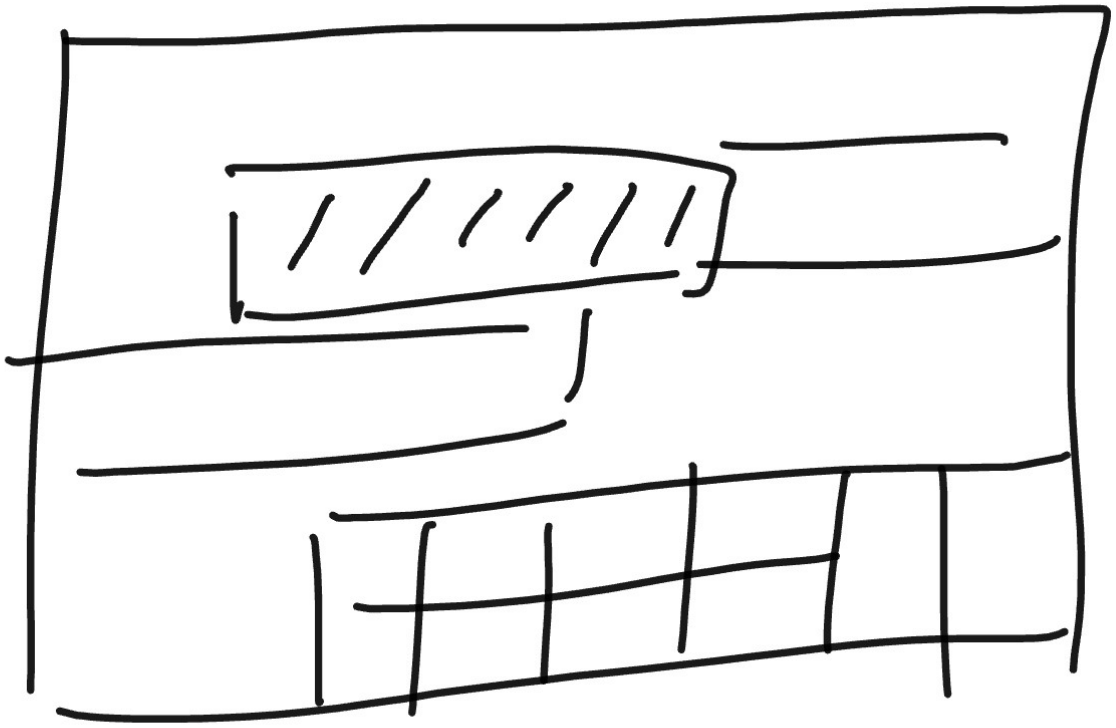


offsetRecord

offsetData

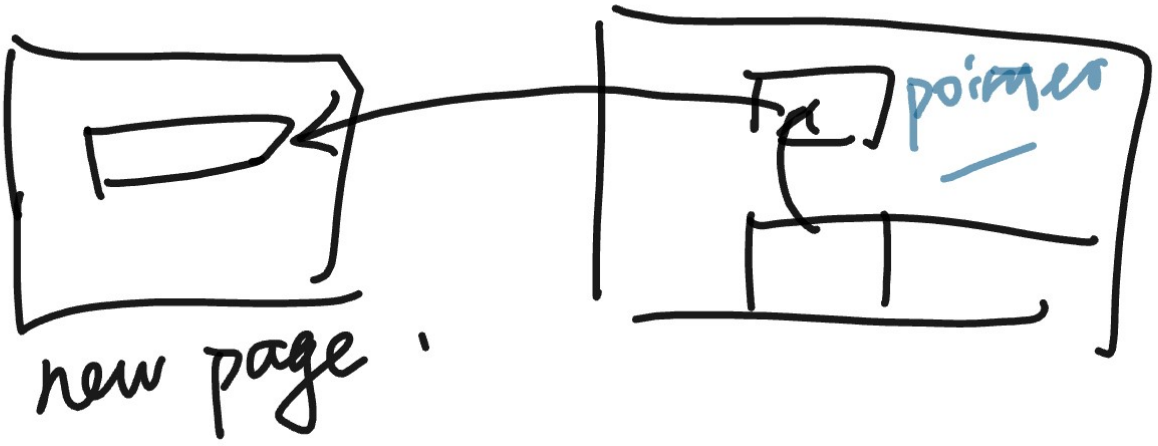
offsetVariableData



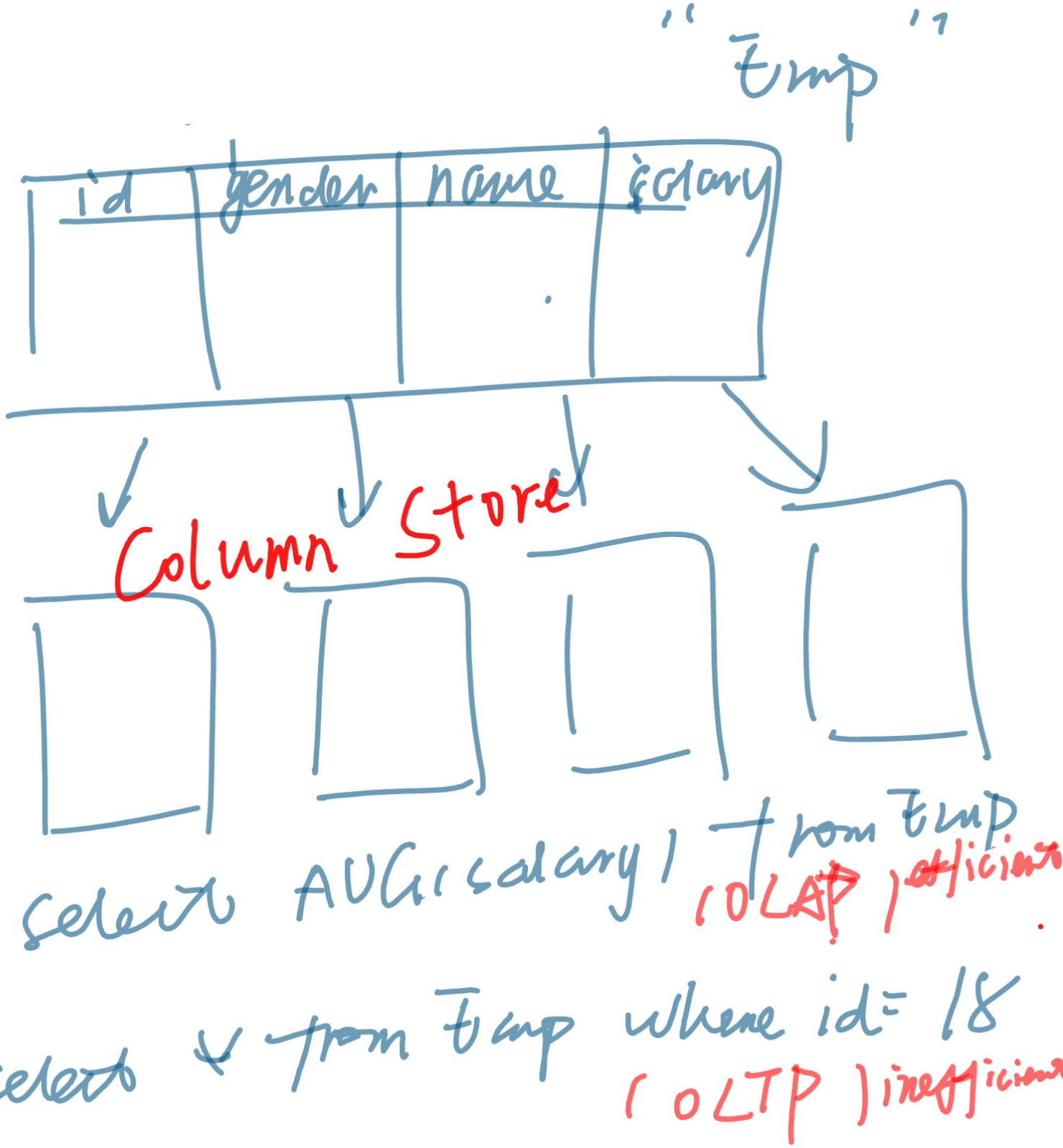
Delete:
set the slot special symbol, shift the following records , change the offset of following record. When insert a new record, add a new slot in the directory and leave the deleted slot untouched.

Update:
case 1: updated record needs less space: shift the following record from the start to end and change the offset.

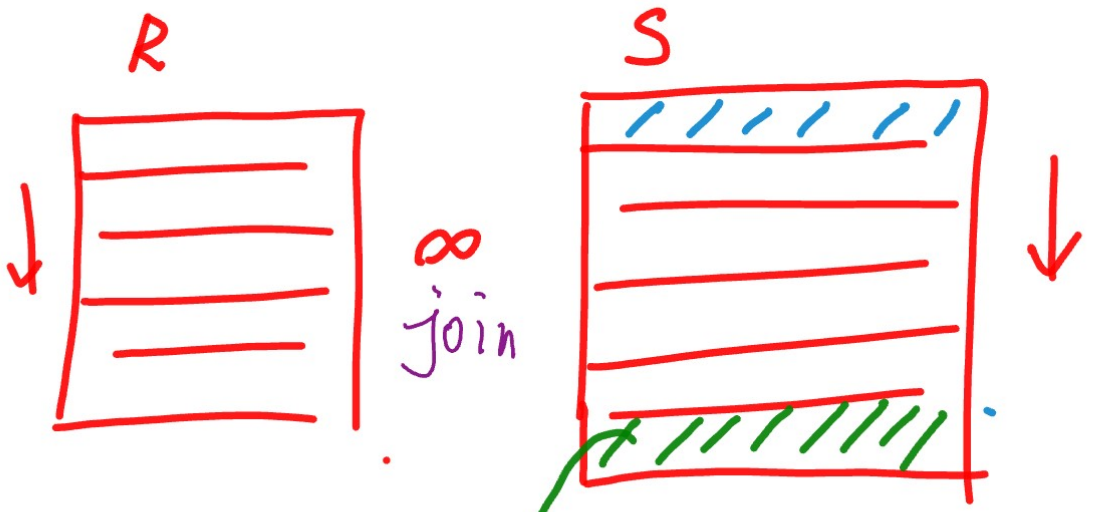
case 2: updated record needs more space: if the page is available to contain this updated record, shift the following record from end to start. We can't change the RID, and the change the record to a pointer, which point to the location of another page where the record is. Remember to update the free space of new page.



Start of free space = PAGE_SIZE - 2 - 2 - N*4 - F

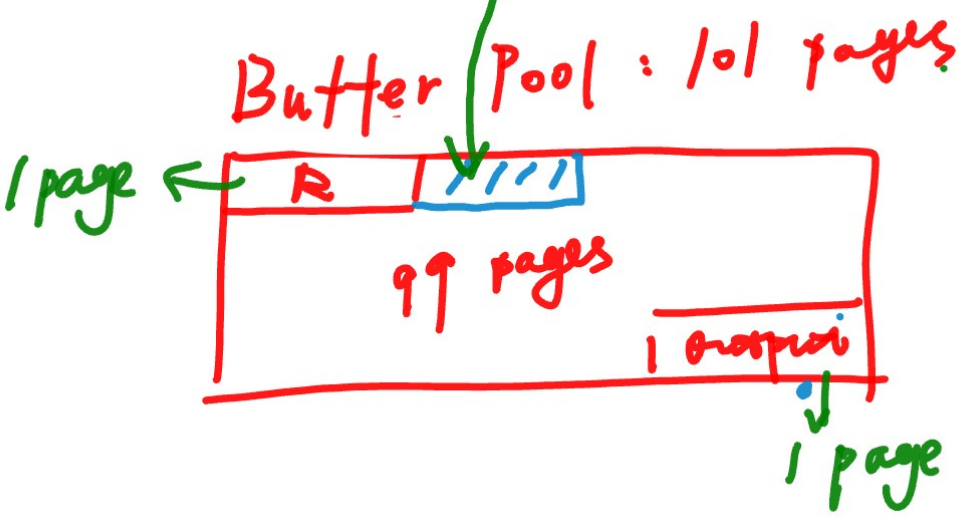


Cache Replacement Policies: LRU(least recently used, with time stamp)



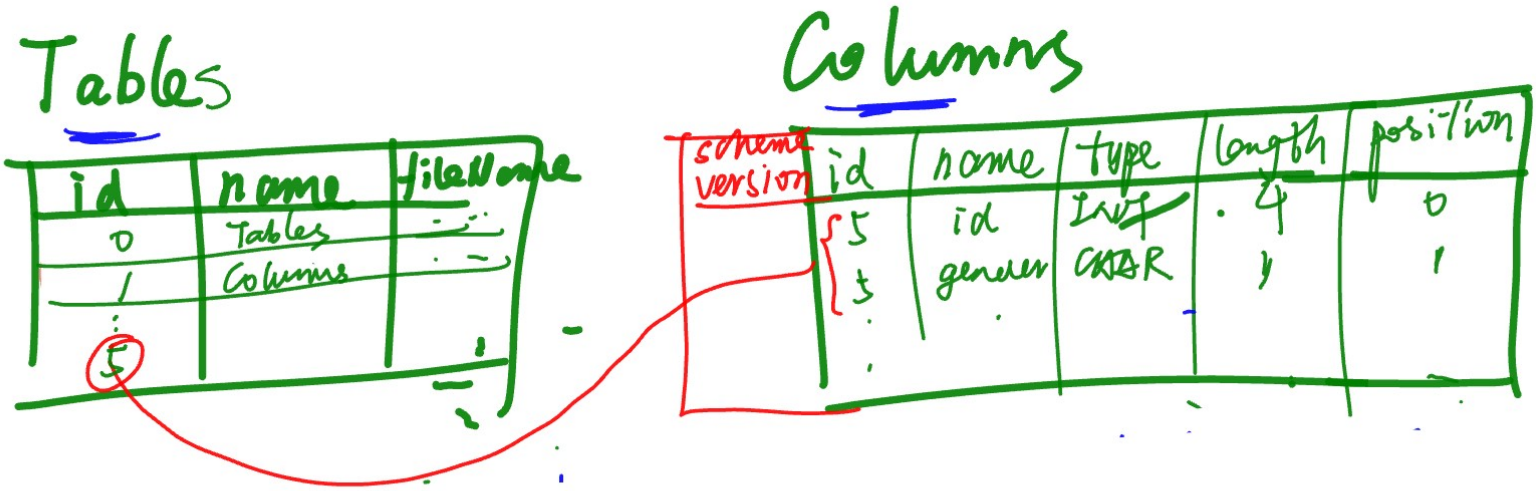
Read a page of R
And read all the pages of S to join.

If S has 100 pages and Buffer pool has capacity of 101 pages.



Catalogs:

Emps(id INT, gender CHAR, name, VARCHAR, sal, FLOAT)

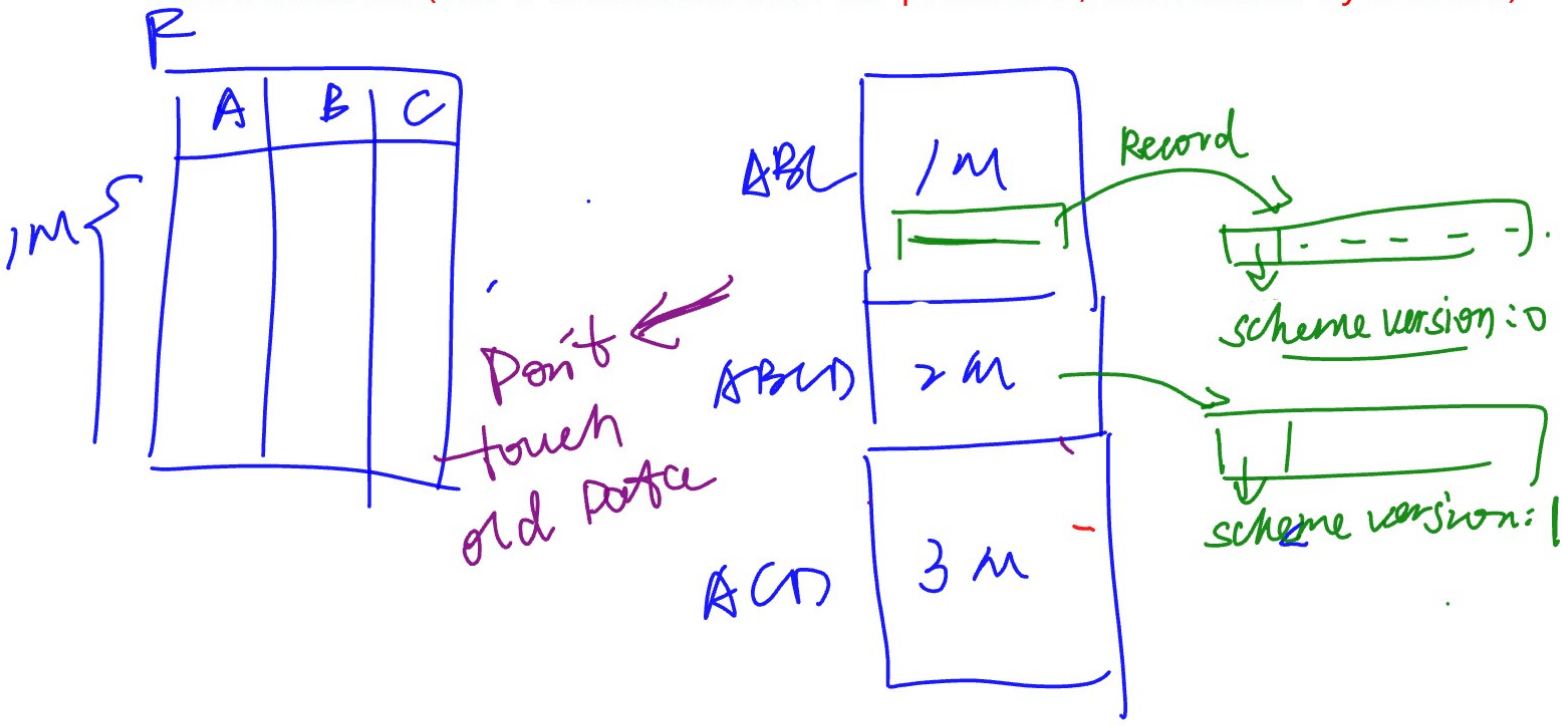


"Table" and "Column" are fixed tables for DBMS.

Important:
"Tables" and "Columns" are also table that need storing in Tables and Columns.

Scheme Versioning:

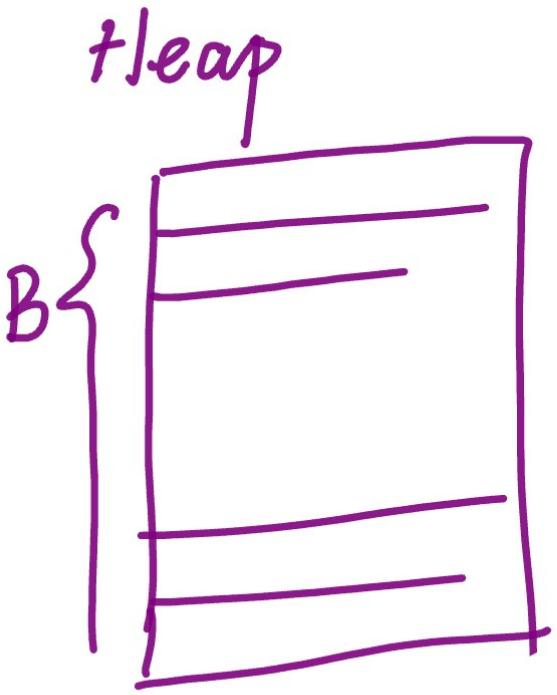
R(A, B, C) -> add addribute D -> insert 2M records -> Drop Attribute B -> Add 3M -> Add B attribute (This B is different from the previous B, differentiate by location)



Columns

scheme version	id	name	length	. .
0	1	A		
0	2	B		
0	3	C		
1	1	A		
1	2	B		
1	3	C		
1	4	D		

Tools:
debugger: dgb
memory: valgrind
write own testcase.



scan: B

Equality: 0.5 B