

MetaData Format :

Static-

S.No.		Size(in Bytes)
1.	File Header (file header is "CS")	2
2.	Date and Time	8
3.	No. of Records	8
4.	No. of Columns	1
5.	Table name	32
6.	Size of Records	2
7.	Data Head	4
8.	Data End	4

Variable-

→ Details of Column (32 Bytes):

- ◆ Column Name (16 Bytes)
- ◆ Data Type/Constraint Info (1 Bytes)
 - First 3 Bit for Data type (details below)
 - 000 Int
 - 001 Real
 - 010 String
 - 011 Date
 - 100 Time
 - Second 3 bit Constraint information (details below)
 - 000 Primary
 - 001 Not Null
 - 010 Auto increment
 - 011 No auto increment
 - Last 2 bits left for some extra info or possible modification
- ◆ Size of data type (1 Byte)
 - First 4 Bit for integer part size and last 4 bits for decimal part size
 - First 4 bits for int/date/time datatype size
 - All 8 bits for string data type size
- ◆ Index of Column (1 byte)
 - 0 - Column logically absent
 - Non Zero - Index of column
- ◆ Auto Increment (5 Byte) - Integer Number
- ◆ Last 8 bytes (for extra info/ possible modification)

Possible way to store integer number (5 Byte storage):

First 4 bits for sign of number 0(for positive) or 1(for negative)
Remaining 4.5 Bytes for 9 digits (each digit take 4 bits)

Possible way to store real number (9 byte storage):

First 5 bytes as integer number for decimal part **(9 digits possible)**

Last 4 bytes for fractional part (as integer without sign bits) **(8 digits possible)**