

Demonstration of MariaDB Data

The following pages contain screenshots that demonstrate a sample of each table in the database. For each table, I created views to run the demonstration queries to create 4 view tables: one for all the int attributes, stringu1, stringu2, and string4. I included unique2 in each of the string views as a stand in for the row number.

In the repo you'll find a SQL script called **wb_data_demo.sql** that shows the queries used to create views for demonstration. Here are the naming conventions used for the views:

- For 10ktup1: head_tail_int, head_tail_st1, head_tail_st2, head_tail_st4
- For 10ktup2: head_tail_int_10K2, head_tail_st1_10K2, head_tail_st2_10K2, head_tail_st4_10K2
- For 1ktup: head_tail_int_1K, head_tail_st1_1K, head_tail_st2_1K, head_tail_st4_1K

```

MariaDB [WB]> CREATE VIEW head_tail_int AS SELECT unique1,unique2,two,four,ten,twenty,onePercent,tenPercent,twentyPercent,fiftyPercent,unique3,evenOnePercent,oddOnePercent FROM tenktup1 WHERE unique2 < 10 OR unique2 > 9990;
Query OK, 0 rows affected (0.005 sec)

MariaDB [WB]> SELECT * FROM head_tail_int;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| unique1 | unique2 | two | four | ten | twenty | onePercent | tenPercent | twentyPercent | fiftyPercent | unique3 | evenOnePercent | oddOnePercent |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 4992 | 0 | 0 | 0 | 2 | 12 | 92 | 2 | 2 | 0 | 4992 | 185 | 184 |
| 1648 | 1 | 0 | 0 | 8 | 8 | 48 | 8 | 3 | 0 | 1648 | 97 | 96 |
| 2850 | 2 | 0 | 2 | 0 | 10 | 50 | 0 | 0 | 0 | 2850 | 101 | 100 |
| 2740 | 3 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 2740 | 81 | 80 |
| 3374 | 4 | 0 | 2 | 4 | 14 | 74 | 4 | 4 | 0 | 3374 | 149 | 148 |
| 9554 | 5 | 0 | 2 | 4 | 14 | 54 | 4 | 4 | 0 | 9554 | 109 | 108 |
| 7925 | 6 | 1 | 1 | 5 | 5 | 25 | 5 | 0 | 1 | 7925 | 51 | 50 |
| 7742 | 7 | 0 | 2 | 2 | 2 | 42 | 2 | 2 | 0 | 7742 | 85 | 84 |
| 8506 | 8 | 0 | 2 | 6 | 6 | 6 | 6 | 1 | 0 | 8506 | 13 | 12 |
| 2802 | 9 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 2802 | 5 | 4 |
| 9153 | 9991 | 1 | 1 | 3 | 13 | 53 | 3 | 3 | 1 | 9153 | 107 | 106 |
| 1358 | 9992 | 0 | 2 | 8 | 18 | 58 | 8 | 3 | 0 | 1358 | 117 | 116 |
| 9366 | 9993 | 0 | 2 | 6 | 6 | 66 | 6 | 1 | 0 | 9366 | 133 | 132 |
| 8012 | 9994 | 0 | 0 | 2 | 12 | 12 | 2 | 2 | 0 | 8012 | 25 | 24 |
| 9118 | 9995 | 0 | 2 | 8 | 18 | 18 | 8 | 3 | 0 | 9118 | 37 | 36 |
| 1549 | 9996 | 1 | 1 | 9 | 9 | 49 | 9 | 4 | 1 | 1549 | 99 | 98 |
| 9483 | 9997 | 1 | 3 | 3 | 3 | 83 | 3 | 3 | 1 | 9483 | 167 | 166 |
| 3312 | 9998 | 0 | 0 | 2 | 12 | 12 | 2 | 2 | 0 | 3312 | 25 | 24 |
| 1635 | 9999 | 1 | 3 | 5 | 15 | 35 | 5 | 0 | 1 | 1635 | 71 | 70 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
19 rows in set (0.001 sec)

```

Figure 1: The first 10 rows and last 9 rows of the **tenktup1** table, only the int attributes.

```

MariaDB [WB]> SELECT * FROM head_tail_st1;
+-----+-----+
| unique2 | string1 |
+-----+-----+
| 0 | AAAAHKAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 1 | AAAACLKXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 2 | AAAAEFQXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 3 | AAAAEBKXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 4 | AAAAEZUXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 5 | AAAAODMXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 6 | AAAALSVXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 7 | AAAALLUXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 8 | AAAAMPEXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9 | AAAAEDUXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9991 | AAAANOBXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9992 | AAAACAGXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9993 | AAAANWGXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9994 | AAAALWEXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9995 | AAAANMSXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9996 | AAAAACPXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9997 | AAAA0ATXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9998 | AAAAEXKXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 9999 | AAAACKXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
+-----+-----+
19 rows in set (0.001 sec)

```

Figure 2: The first 10 rows and last 9 rows of the **tenktup1** table, **stringu1** attribute.

```

MariaDB [WB]> SELECT * FROM head_tail_st2;
+-----+-----+
| unique2 | stringu2 |
+-----+-----+
| 0 | AAAAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 1 | AAAAAABxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 2 | AAAAAACxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 3 | AAAAAADxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 4 | AAAAAAExxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 5 | AAAAAAFxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 6 | AAAAAAGxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 7 | AAAAAAHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 8 | AAAAAAIxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9 | AAAAAAJxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9991 | AAAA0UHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9992 | AAAA0UIxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9993 | AAAA0UJxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9994 | AAAA0UKxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9995 | AAAA0ULxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9996 | AAAA0UMxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9997 | AAAA0UNxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9998 | AAAA0UOxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9999 | AAAA0UPxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
+-----+-----+
19 rows in set (0.001 sec)

```

Figure 3: The first 10 rows and last 9 rows of the **tenktup1** table, **stringu2** attribute.

```

MariaDB [WB]> SELECT * FROM head_tail_st4;
+-----+-----+
| unique2 | string4 |
+-----+-----+
| 0 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 1 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 2 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 3 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 4 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 5 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 6 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 7 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 8 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9991 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9992 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9993 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9994 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9995 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9996 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9997 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9998 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9999 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
+-----+-----+
19 rows in set (0.001 sec)

```

Figure 4: The first 10 rows and last 9 rows of the **tenktup1** table, **string4** attribute.

```
MariaDB [WB]> select * from head_tail_int_10K2;
```

unique1	unique2	two	four	ten	twenty	onePercent	tenPercent	twentyPercent	fiftyPercent	unique3	evenOnePercent	oddOnePercent
4992	0	0	0	2	12	92	2	2	0	4992	185	184
1648	1	0	0	8	8	48	8	3	0	1648	97	96
2850	2	0	2	0	10	50	0	0	0	2850	101	100
2740	3	0	0	0	0	40	0	0	0	2740	81	80
3374	4	0	2	4	14	74	4	4	0	3374	149	148
9554	5	0	2	4	14	54	4	4	0	9554	109	108
7925	6	1	1	5	5	25	5	0	1	7925	51	50
7742	7	0	2	2	2	42	2	2	0	7742	85	84
8506	8	0	2	6	6	6	6	1	0	8506	13	12
2802	9	0	2	2	2	2	2	2	0	2802	5	4
9153	9991	1	1	3	13	53	3	3	1	9153	107	106
1358	9992	0	2	8	18	58	8	3	0	1358	117	116
9366	9993	0	2	6	6	66	6	1	0	9366	133	132
8012	9994	0	0	2	12	12	2	2	0	8012	25	24
9118	9995	0	2	8	18	18	8	3	0	9118	37	36
1549	9996	1	1	9	9	49	9	4	1	1549	99	98
9483	9997	1	3	3	3	83	3	3	1	9483	167	166
3312	9998	0	0	2	12	12	2	2	0	3312	25	24
1635	9999	1	3	5	15	35	5	0	1	1635	71	70

19 rows in set (0.001 sec)

Figure 5: The first 10 rows and last 9 rows of the tenktup2 table, only the int attributes.

```
MariaDB [WB]> select * from head_tail_st1_10K2;
```

	unique2	stringu1
0	AAAAHKA	xx
1	AAAACLK	xx
2	AAAEFQx	xx
3	AAAEBKx	xx
4	AAAEZUx	xx
5	AAAAODM	xx
6	AAAALSV	xx
7	AAAALLU	xx
8	AAAAMPE	xx
9	AAAEDUX	xx
9991	AAAANOB	xx
9992	AAAACAG	xx
9993	AAAANWG	xx
9994	AAAALWE	xx
9995	AAAANMS	xx
9996	AAAACHP	xx
9997	AAAAOAT	xx
9998	AAAEXKx	xx
9999	AAAACKX	xx

```
9 rows in set (0.001 sec)
```

Figure 6: The first 10 rows and last 9 rows of the **tenktup2** table, **stringu1** attribute.

```

MariaDB [WB]> select * from head_tail_st2_10K2;
+-----+-----+
| unique2 | stringu2 |
+-----+-----+
| 0 | AAAAAAAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 1 | AAAAAAABxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 2 | AAAAAAACxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 3 | AAAAAAADxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 4 | AAAAAAAExxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 5 | AAAAAAAFxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 6 | AAAAAAGxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 7 | AAAAAAHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 8 | AAAAAAIxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9 | AAAAAAJxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9991 | AAAA0UHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9992 | AAAA0UIxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9993 | AAAA0UJxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9994 | AAAA0UKxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9995 | AAAA0ULxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9996 | AAAA0UMxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9997 | AAAA0UNxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9998 | AAAA0UOxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9999 | AAAA0UPxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
+-----+-----+
19 rows in set (0.001 sec)

```

Figure 7: The first 10 rows and last 9 rows of the **tenktup2** table, **stringu2** attribute.


```

MariaDB [WB]> select * from head_tail_st4_10K2;
+-----+-----+
| unique2 | string4 |
+-----+-----+
| 0 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 1 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 2 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 3 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 4 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 5 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 6 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 7 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 8 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9991 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9992 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9993 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9994 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9995 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9996 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9997 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9998 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9999 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
+-----+-----+
9 rows in set (0.001 sec)

```

Figure 8: The first 10 rows and last 9 rows of the **tenktup2** table, **string4** attribute.

```
MariaDB [WB]> select * from head_tail_int_1K;
```

unique1	unique2	two	four	ten	twenty	onePercent	tenPercent	twentyPercent	fiftyPercent	unique3	evenOnePercent	oddOnePercent
91	0	1	3	1	11	91	1	1	1	91	183	182
207	1	1	3	7	7	7	7	2	1	207	15	14
684	2	0	0	4	4	84	4	4	0	684	169	168
883	3	1	3	3	3	83	3	3	1	883	167	166
575	4	1	3	5	15	75	5	0	1	575	151	150
4	5	0	0	4	4	4	4	4	0	4	9	8
166	6	0	2	6	6	66	6	1	0	166	133	132
720	7	0	0	0	0	20	0	0	0	720	41	40
239	8	1	3	9	19	39	9	4	1	239	79	78
711	9	1	3	1	11	11	1	1	1	711	23	22
854	991	0	2	4	14	54	4	4	0	854	109	108
475	992	1	3	5	15	75	5	0	1	475	151	150
880	993	0	0	0	0	80	0	0	0	880	161	160
9	994	1	1	9	9	9	9	4	1	9	19	18
425	995	1	1	5	5	25	5	0	1	425	51	50
70	996	0	2	0	10	70	0	0	0	70	141	140
45	997	1	1	5	5	45	5	0	1	45	91	90
610	998	0	2	0	10	10	0	0	0	610	21	20
535	999	1	3	5	15	35	5	0	1	535	71	70

19 rows in set (0.001 sec)

Figure 9: The first 10 rows and last 9 rows of the **onektup** table, only the int attributes.

```

MariaDB [WB]> select * from head_tail_st1_1K;
+-----+-----+
unique2 | stringu1
+-----+-----+
0 | AAAAAADNxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1 | AAAAAAHZxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
2 | AAAAABAIxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
3 | AAAAAHBZxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
4 | AAAAAWDxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
5 | AAAAAAExxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
6 | AAAAAAGKxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
7 | AAAAABBSxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
8 | AAAAAJFxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
9 | AAAAABJxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
991 | AAAAABGWxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
992 | AAAAAASHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
993 | AAAAABHNxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
994 | AAAAAAJxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
995 | AAAAAQJxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
996 | AAAAAACSxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
997 | AAAAAABTxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
998 | AAAAAAMxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
999 | AAAAAUPxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
+-----+-----+
9 rows in set (0.001 sec)

```

Figure 10: The first 10 rows and last 9 rows of the **onektup** table, **stringu1** attribute.

```
MariaDB [WB]> select * from head_tail_st2_1K;
```

	unique2	stringu2
0	AAAAAAA	xx
1	AAAAAAB	xx
2	AAAAAAC	xx
3	AAAAAAD	xx
4	AAAAAAE	xx
5	AAAAAAF	xx
6	AAAAAAG	xx
7	AAAAAAH	xx
8	AAAAAAI	xx
9	AAAAAAJ	xx
991	AAAABMD	xx
992	AAAABME	xx
993	AAAABMF	xx
994	AAAABMG	xx
995	AAAABMH	xx
996	AAAABMI	xx
997	AAAABMJ	xx
998	AAAABMK	xx
999	AAAABML	xx

```
19 rows in set (0.001 sec)
```

Figure 11: The first 10 rows and last 9 rows of the **onektup** table, **stringu2** attribute.

```

MariaDB [WB]> select * from head_tail_st4_1K;
+-----+-----+
| unique2 | string4 |
+-----+-----+
| 0 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 1 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 2 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 3 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 4 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 5 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 6 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 7 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 8 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 9 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 991 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 992 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 993 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 994 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 995 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 996 | AAAAxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 997 | HHHHxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 998 | 0000xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| 999 | VVVVxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
+-----+-----+
19 rows in set (0.000 sec)

```

Figure 12: The first 10 rows and last 9 rows of the **onektup** table, **string4** attribute.