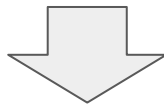


Привести исходные данные в 1NF без соблюдения 2NF

Денормализованная витрина

user id	user_group id	user info	user_group desc	access dtm	access type cd	access type desc
1	1	v.poljakov; WinAD	adm	01.01.2015	RO	read-only
1	2	v.poljakov; WinAD	etl	15.06.2015	XX	full
1	4	v.poljakov; WinAD	bi	31.08.2015	XX	full
2	1	k.kartsev; WinAD	adm	01.01.2015	RO	read-only
2	2	k.kartsev; WinAD	etl	15.06.2015	XX	full
2	5	k.kartsev; WinAD	dq	31.08.2015	XX	full
3	1	sotnich; Enterprise	adm	01.01.2015	XX	full
3	6	sotnich; Enterprise	root	31.08.2015	RW	read-write



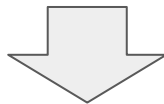
1NF (user_info → user_login , auth_type)

user id	user_group id	user login	auth type	user_group desc	access dtm	access type cd	access type desc
1	1	v.poljakov	WinAD	adm	01.01.2015	RO	read-only
1	2	v.poljakov	WinAD	etl	15.06.2015	XX	full
1	4	v.poljakov	WinAD	bi	31.08.2015	XX	full
2	1	k.kartsev	WinAD	adm	01.01.2015	RO	read-only
2	2	k.kartsev	WinAD	etl	15.06.2015	XX	full
2	5	k.kartsev	WinAD	dq	31.08.2015	XX	full
3	1	sotnich	Enterprise	adm	01.01.2015	XX	full
3	6	sotnich	Enterprise	root	31.08.2015	RW	read-write

Привести исходные данные в 2NF без соблюдения 3NF

1 NF

user id	user_group id	user login	auth type	user_group desc	access dttm	access type cd	access type desc
1	1	v.poljakov	WinAD	adm	01.01.2015	RO	read-only
1	2	v.poljakov	WinAD	etl	15.06.2015	XX	full
1	4	v.poljakov	WinAD	bi	31.08.2015	XX	full
2	1	k.kartsev	WinAD	adm	01.01.2015	RO	read-only
2	2	k.kartsev	WinAD	etl	15.06.2015	XX	full
2	5	k.kartsev	WinAD	dq	31.08.2015	XX	full
3	1	sotnich	Enterprise	adm	01.01.2015	XX	full
3	6	sotnich	Enterprise	root	31.08.2015	RW	read-write



2NF

user_group id	user_group desc
1	adm
2	etl
4	bi
5	dq
6	root

user id	user login	auth type
1	v.poljakov	WinAD
2	k.kartsev	WinAD
3	sotnich	Enterprise

user id	user_group id	access dttm	access type cd	access type desc
1	1	01.01.2015	RO	read-only
1	2	15.06.2015	XX	full
1	4	31.08.2015	XX	full
2	1	01.01.2015	RO	read-only
2	2	15.06.2015	XX	full
2	5	31.08.2015	XX	full
3	1	01.01.2015	XX	full
3	6	31.08.2015	RW	read-write

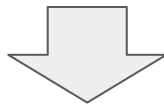
Привести исходные данные в 3NF без соблюдения 2NF

2 NF

user_group_id	user_group_desc
1	adm
2	etl
4	bi
5	dq
6	root

user_id	user_login	auth_type
1	v.poljakov	WinAD
2	k.kartsev	WinAD
3	sotnich	Enterprise

user_id	user_group_id	access_dttm	access_type_cd	access_type_desc
1	1	01.01.2015	RO	read-only
1	2	15.06.2015	XX	full
1	4	31.08.2015	XX	full
2	1	01.01.2015	RO	read-only
2	2	15.06.2015	XX	full
2	5	31.08.2015	XX	full
3	1	01.01.2015	XX	full
3	6	31.08.2015	RW	read-write



3NF

user_group_id	user_group_desc
1	adm
2	etl
4	bi
5	dq
6	root

user_id	user_login	auth_type
1	v.poljakov	WinAD
2	k.kartsev	WinAD
3	sotnich	Enterprise

id	access_type_cd	access_type
1	RO	read-only
2	XX	full
3	RW	read-write

user_id\$	user_group_id	access_dttm	access_type_id
1	1	01.01.2015	1
1	2	15.06.2015	2
1	4	31.08.2015	2
2	1	01.01.2015	1
2	2	15.06.2015	2
2	5	31.08.2015	2
3	1	01.01.2015	2
3	6	31.08.2015	3