# **Exploring anonymized data**

### **Video overview**

- 1. What is anonymized data?
- 2. What can we do with it?



Text	Encoded text
I want this table	7ugy <mark>972h</mark> 98ww hj34
Table is what I want	hj34 4f08 rtte 7ugy 972h
This table is red	98ww hj34 4f08 4rj9
And this is me	jk8r 98ww 4f08 9jo4

id	<b>x1</b>	<b>x2</b>	х3	х4	<b>x</b> 5	х6
1	m268i97y	0	NO	105.4	14	
2	j0gheu6	1	YES	25.631	12	
3	26fmsp6u	1	NO	12.0	12	m268i97y
4	13e5dpzp	0	NO	140.12	14	m268i97y

id	<b>x1</b>	<b>x2</b>	х3	<b>x4</b>	<b>x5</b>	х6
1	m268i97y	0	NO	105.4	14	
2	j0gheu6	1	YES	25.631	12	
3	26fmsp6u	1	NO	12.0	12	m268i97y
4	13e5dpzp	0	NO	140.12	14	m268i97y

#### Explore individual features

- Guess the meaning of the columns
- Guess the types of the column

### Explore feature relations

- Find relations between pairs
- Find feature groups

id	<b>x1</b>	<b>x2</b>	х3	<b>x4</b>	<b>x</b> 5	хб
1	m268i97y	0	NO	105.4	14	
2	j0gheu6	1	YES	25.631	12	
3	26fmsp6u	1	NO	12.0	12	m268i97y
4	13e5dpzp	0	NO	140.12	14	m268i97y

#### Explore individual features

- Guess the meaning of the columns
- Guess the types of the column
- Explore feature relations
  - Find relations between pairs
  - Find feature groups

## Notebook

## **Exploring individual features: guessing types**

id	<b>x1</b>	<b>x2</b>	х3	<b>x4</b>	<b>x5</b>	х6
1	m268i97y	0	NO	105.4	14	
2	j0gheu6	1	YES	25.631	12	
3	26fmsp6u	1	NO	12.0	12	m268i97y
4	13e5dpzp	0	NO	140.12	14	m268i97y

## **Exploring individual features: guessing types**

id	<b>x1</b>	<b>x2</b>	х3	<b>x4</b>	<b>x5</b>	х6
1	m268i97y	0	NO	105.4	14	
2	j0gheu6	1	YES	25.631	12	
3	26fmsp6u	1	NO	12.0	12	m268i97y
4	13e5dpzp	0	NO	140.12	14	m268i97y

#### Helpful functions:

```
df.dtypes
df.info()
x.value_counts()
x.isnull()
```

### **Conclusion**

- Two things to do with anonymized features:
  - Try to decode the features
    - Guess the true meaning of the feature
  - Guess the feature types
    - Each type needs its own preprocessing