

Data cleaning

INTRODUCTION TO KNIME



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Data cleaning



Filter columns

| # | Name | Department | Salary | Favorite food |
|---|--------|------------|--------|---------------|
| 1 | Jenny | Sales | ? | Pizza |
| 2 | Alex | Finance | 22000 | Sushi |
| 3 | Taylor | R&D | 28000 | Tacos |
| 4 | Alex | Finance | 22000 | Sushi |
| 5 | Sam | R&D | 23000 | Salad |

Filter columns

| | | | | | Filter out |
|---|--------|------------|--------|---------------|------------|
| # | Name | Department | Salary | Favorite food | |
| 1 | Jenny | Sales | ? | Pizza | |
| 2 | Alex | Finance | 22000 | Sushi | |
| 3 | Taylor | R&D | 28000 | Tacos | |
| 4 | Alex | Finance | 22000 | Sushi | |
| 5 | Sam | R&D | 23000 | Salad | |

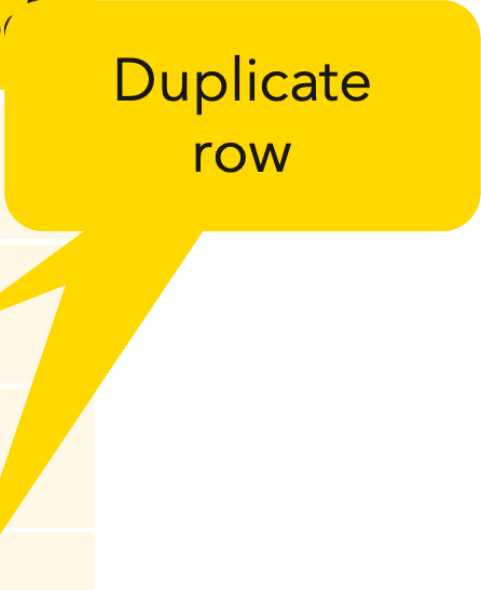
Filter rows

| # | Name | Department | Salary | Favorite food |
|---|--------|------------|--------|---------------|
| 1 | Jenny | Sales | ? | Pizza |
| 2 | Alex | Finance | 22000 | Sushi |
| 3 | Taylor | R&D | 28000 | Tacos |
| 4 | Alex | Finance | 22000 | Sushi |
| 5 | Sam | R&D | 23000 | Salad |

Employees from R&D

Filter duplicates

| # | Name | Department | Salary | Favorite food |
|----------|-------------|----------------|--------------|---------------|
| 1 | Jenny | Sales | ? | Pizza |
| 2 | Alex | Finance | 22000 | Sushi |
| 3 | Taylor | R&D | 28000 | Tacos |
| 4 | Alex | Finance | 22000 | Sushi |
| 5 | Sam | R&D | 23000 | Salad |

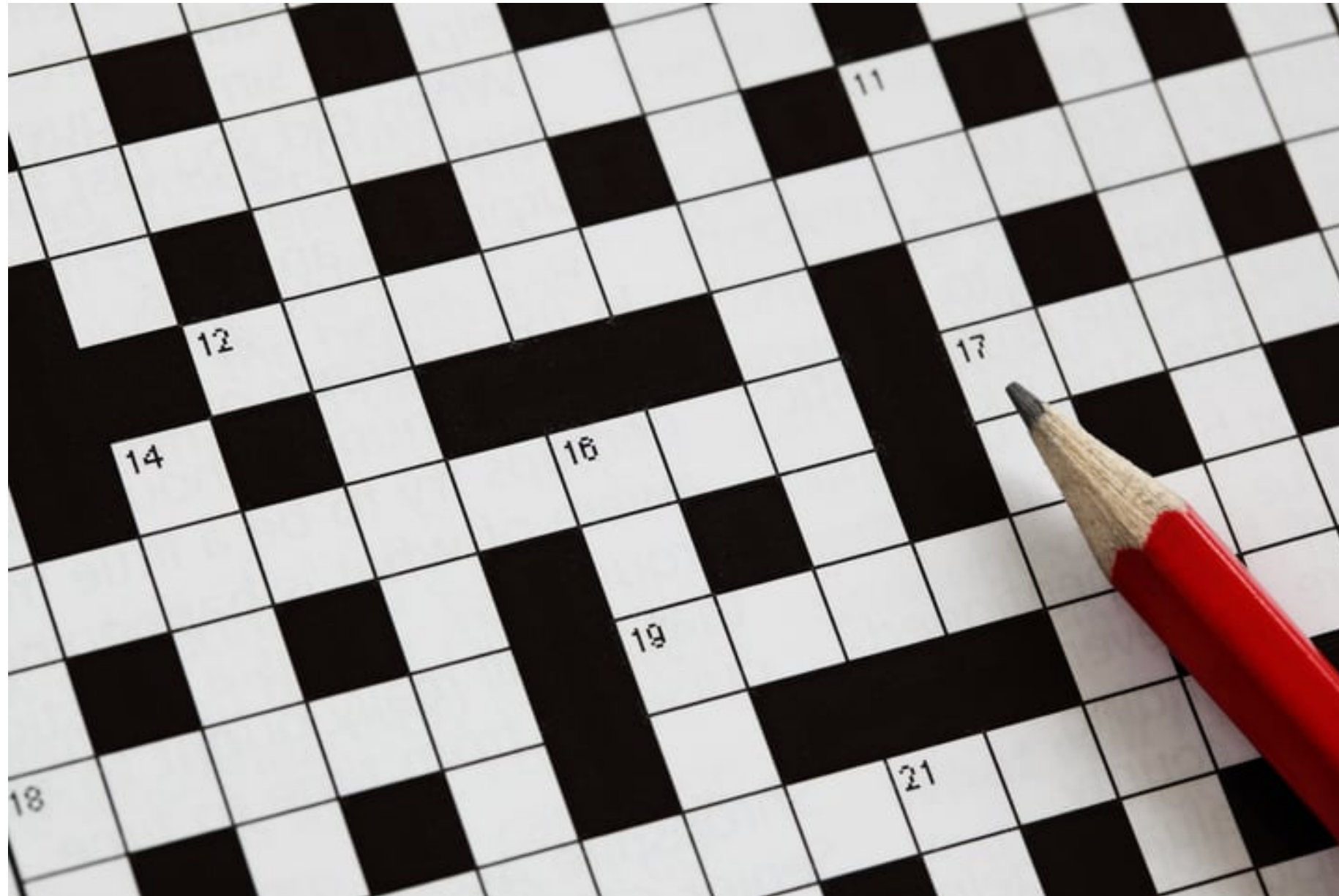


Handle missing values

| # | Name | Department | Salary | Favorite food |
|---|--------|------------|--------|---------------|
| 1 | Jenny | Sales | ? | Pizza |
| 2 | Alex | Finance | 22000 | Sushi |
| 3 | Taylor | R&D | 28000 | Tacos |
| 4 | Alex | Finance | 22000 | Sushi |
| 5 | Sam | R&D | 23000 | Salad |

Missing value

Handle missing values



Data types

| # | Name | Salary | Birthday | Remote |
|---|--------|--------|------------|--------|
| 1 | Jenny | 25000 | 12/12/1990 | TRUE |
| 2 | Alex | 22000 | 04/03/1998 | FALSE |
| 3 | Taylor | 28000 | 11/02/1987 | FALSE |
| 4 | Alex | 22000 | 04/03/1998 | FALSE |
| 5 | Sam | 23000 | 02/07/1989 | TRUE |

Data types

String

| # | Name | Salary | Birthday | Remote |
|---|--------|--------|------------|--------|
| 1 | Jenny | 25000 | 12/12/1990 | TRUE |
| 2 | Alex | 22000 | 04/03/1998 | FALSE |
| 3 | Taylor | 28000 | 11/02/1987 | FALSE |
| 4 | Alex | 22000 | 04/03/1998 | FALSE |
| 5 | Sam | 23000 | 02/07/1989 | TRUE |

Data types

| String | | Number | | | |
|--------|--------|--------|------------|--------|--|
| # | Name | Salary | Birthday | Remote | |
| 1 | Jenny | 25000 | 12/12/1990 | TRUE | |
| 2 | Alex | 22000 | 04/03/1998 | FALSE | |
| 3 | Taylor | 28000 | 11/02/1987 | FALSE | |
| 4 | Alex | 22000 | 04/03/1998 | FALSE | |
| 5 | Sam | 23000 | 02/07/1989 | TRUE | |

Data types

| String | | Number | Date&Time | |
|--------|--------|--------|------------|--------|
| # | Name | Salary | Birthday | Remote |
| 1 | Jenny | 25000 | 12/12/1990 | TRUE |
| 2 | Alex | 22000 | 04/03/1998 | FALSE |
| 3 | Taylor | 28000 | 11/02/1987 | FALSE |
| 4 | Alex | 22000 | 04/03/1998 | FALSE |
| 5 | Sam | 23000 | 02/07/1989 | TRUE |

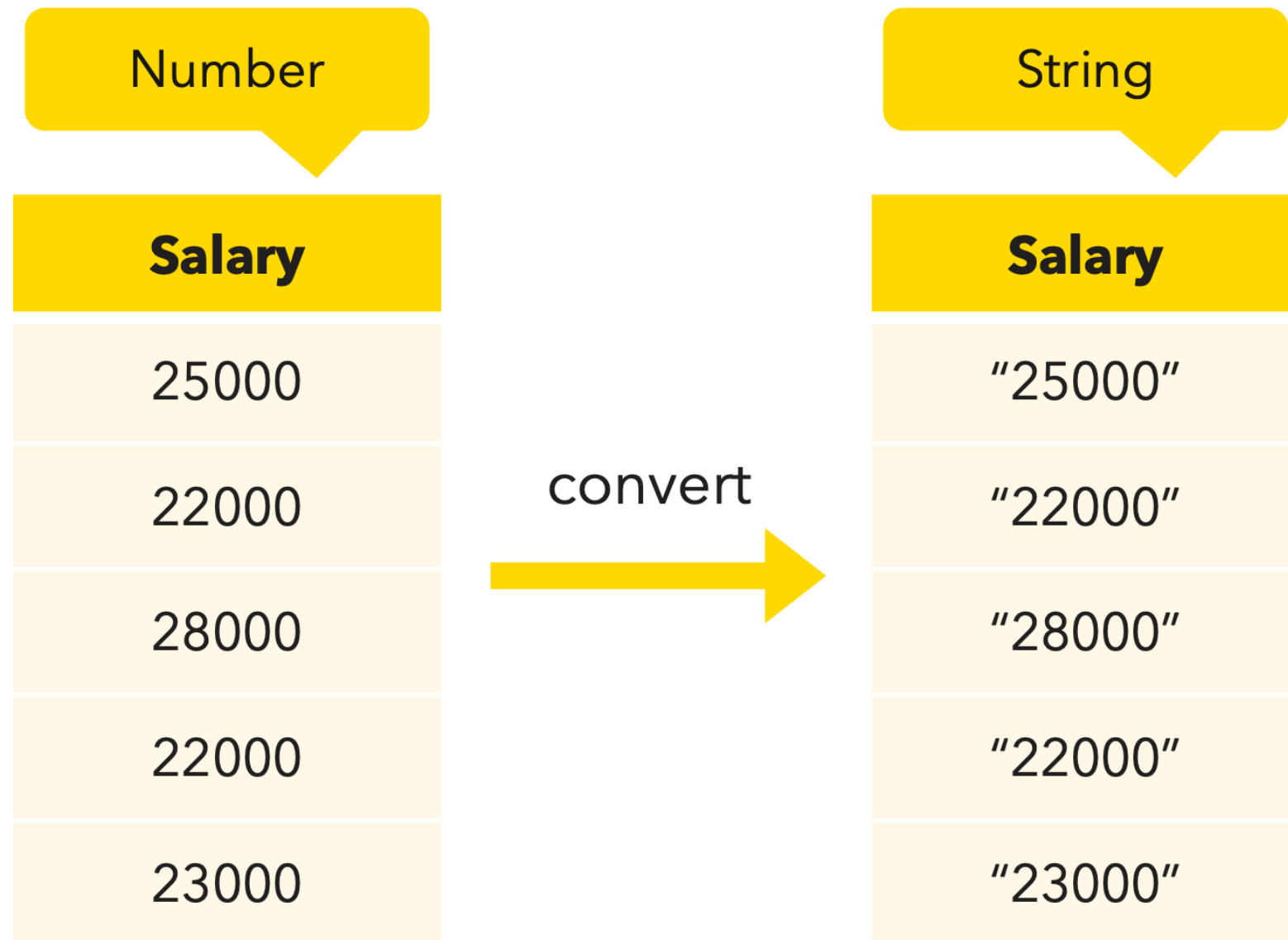
Data types

| | | | | | String | Number | Date&Time | Boolean |
|---|--------|--------|------------|--------|--------|--------|-----------|---------|
| # | Name | Salary | Birthday | Remote | | | | |
| 1 | Jenny | 25000 | 12/12/1990 | TRUE | | | | |
| 2 | Alex | 22000 | 04/03/1998 | FALSE | | | | |
| 3 | Taylor | 28000 | 11/02/1987 | FALSE | | | | |
| 4 | Alex | 22000 | 04/03/1998 | FALSE | | | | |
| 5 | Sam | 23000 | 02/07/1989 | TRUE | | | | |

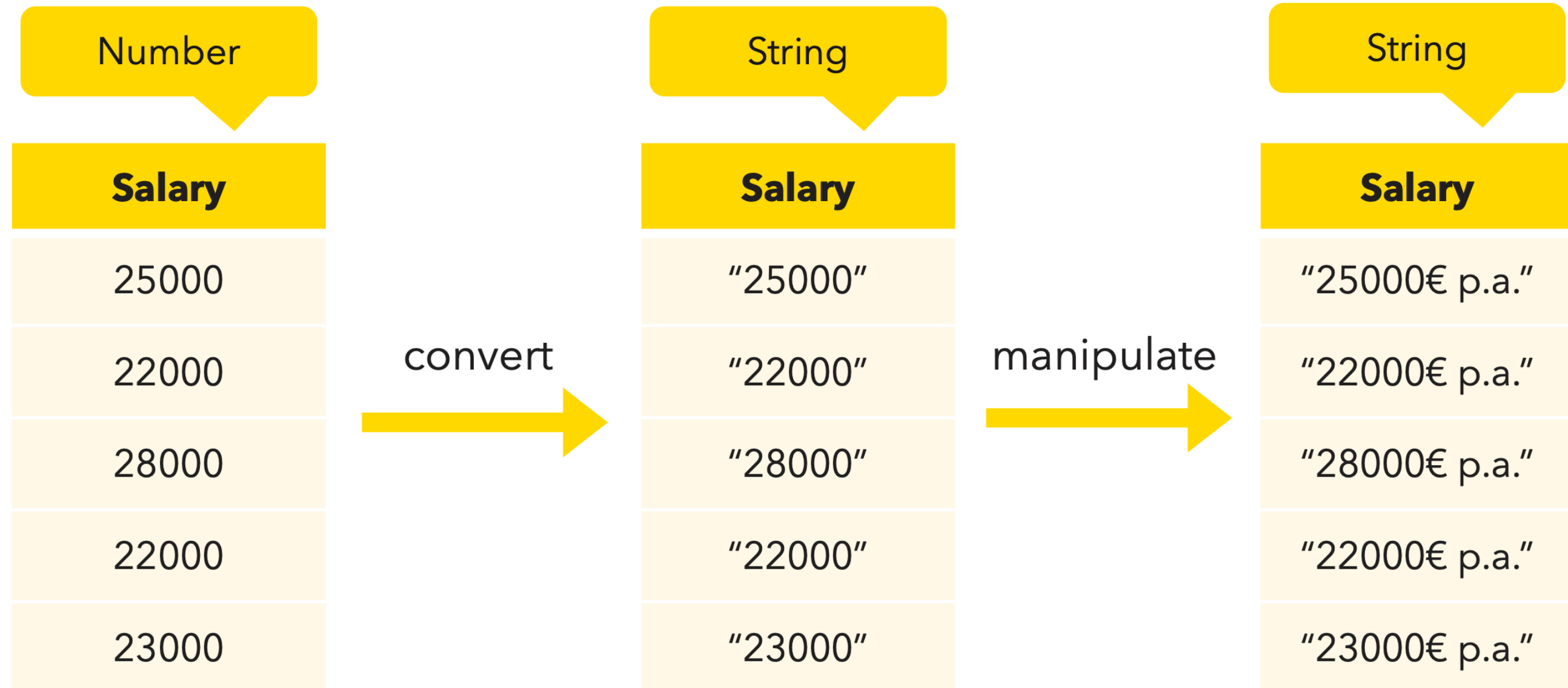
Convert Data Types

| Number | |
|--------|-------|
| Salary | |
| | 25000 |
| | 22000 |
| | 28000 |
| | 22000 |
| | 23000 |

Convert Data Types



Convert Data Types



Clean strings

| Email |
|--------------------------|
| jenny.brówn @EXAMPLE.COM |
| alex.lée @EXAMPLE.COM |
| taylor.tóñs @EXAMPLE.COM |
| alex.lée @EXAMPLE.COM |
| sóphia.kim @EXAMPLE.COM |

Clean strings

| Email |
|--------------------------|
| jenny.brówn @EXAMPLE.COM |
| alex.lée @EXAMPLE.COM |
| taylor.tóñs @EXAMPLE.COM |
| alex.lée @EXAMPLE.COM |
| sóphia.kim @EXAMPLE.COM |

clean



| Email |
|--|
| jenny.brown@example.com |
| alex.lee@example.com |
| taylor.tons@example.com |
| alex.lee@example.com |
| sophia.kim@example.com |

Let's practice!

INTRODUCTION TO KNIME

Cleaning data in KNIME Analytics Platform

INTRODUCTION TO KNIME



Full Name
Instructor

Let's practice!

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