INTRODUCTION TO VISUAL MARKUP

Common Issues with Data about People

Watch out for common issues

Data are expressed differently

Nick Names (Elizabeth & Beth)

Data change over time

Women get married and change their last name

Data are not unique attributes

- John Smith (there are different people that have the same name)
- Twins & Family members have similar identifying information such as DOB & last name
- Same names in Families with different suffix (Jr and Sr)

Data are sometimes missing

SSN are often missing

Data have errors

- Inserting/deleting extra characters
- Typing in the wrong character
- Transposing two characters
- First name and last name are mixed up
- Day and month is mixed up

Missing Values



Data are sometimes missing.

Pair	ID	First name	Last name	DoB(M/D/Y)	Sex	Race
7	0000018335	PATSY	CALLAHAN	11/13/1948	F	В
	?	PATSY	CALLAHAN	?	F	В

Added or Deletions Characters —



Insertion (or deletion) of characters are common typing errors

Pair	ID	First name	Last name	DoB(M/D/Y)	Sex	Race
1	8000001276 + 8000002768	JAYDEN T JADEN	TIPTON	09/09/1960 09/09/1960	M M	W

Different Characters X

Mistyping can lead to certain characters replacing others

Pair	ID	First name	Last name	DoB(M/D/Y)	Sex	Race
	9000018 <mark>54</mark> 0	SAL	BYRD	04/07/1960	F	W
3	×		×	×		
	9000018 <mark>87</mark> 0	SAL	BIRD	04/0 <mark>9</mark> /1960	F	W

Switched Characters ::

Two characters can be interchanged by mistake

Pair	ID	First name	Last name	DoB(M/D/Y)	Sex	Race
11	1719582520 =	ROGRES ==	HYLEMON	07/15/19 <mark>24</mark> ⇄	М	W
	1719 <mark>85</mark> 2520	ROGERS	HYLEMON	07/15/19 <mark>42</mark>	M	W

Column Swaps



Sometimes whole values are swapped as well:

Date Swaps

Pair	ID	First name	Last name	DoB (M/D/Y)	Sex	Race
9	0000020502	SAMANTHA	MORGAN	02/11/1958	F	W
	0000020502	SAMANTHA	MORGAN	11/02/1958	F	W

Name Swaps

Pair	ID	First name	Last name	DoB (M/D/Y)	Sex	Race
5	0000006947 0000006947	BRYANT MADELINE	MADELINE BRYANT	09/22/1926 09/22/1926	F F	W

Different



This icon is shown if the values in a column are very different.

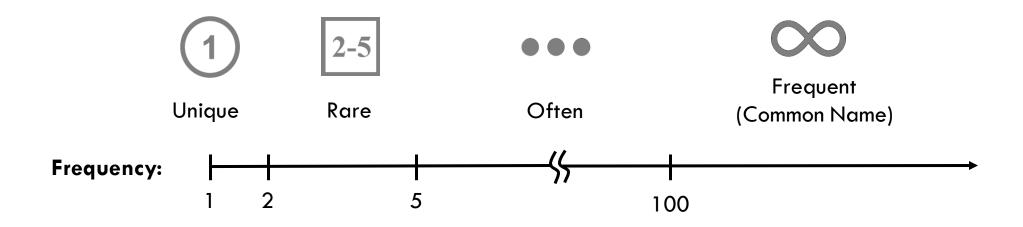
Pair	ID	First name	Last name	DoB(M/D/Y)	Sex	Race
13	6556368585 1092091430	WILL OIFF DAVE	GREENE	07/03/1950 07/03/1950	M M	B DIFF W

Name Frequency

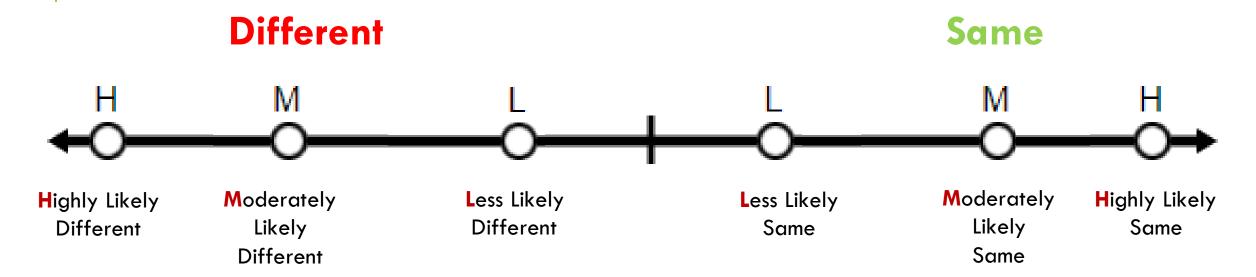


It would not be surprising for two people to have the same **common name**, but it might be unlikely for two people to have the same **rare names**.

Frequency icons indicate how many times a given name occurred in the data source



The Answer Buttons



If you think the rows are the **same person**, click one of the choices on the **right side**. Pick one of L, M, H depending on your confidence level.

If you think the rows are for **different people**, click one of the choices on the **left side**. Pick one of L, M, H depending on your confidence level.