

- -> notebooks from this lecture: <https://github.com/ine-rmotr-curriculum/data-cleaning-rmotr-freecodecamp>
- -> dealing with duplicates
- -> defining what duplicate values are
- -> in this case we have a series which contains ambassadors
- -> we want to invite one ambassador per country
- -> we can see which ones belong to the same country
- -> we need to define the duplicates
- -> political rules for each
- -> duplicated methods returns true
- -> the method is true working top down
- -> for example, if we work our way down in a series and see there are two duplicates
 - -> one country having two ambassadors
 - -> we do this from top down, or bottom up
- -> we can drop duplicates
- -> dropping all the values that check as true
- -> **for subsets, we have multiple players in the data frame, but they can be in this example present four times**
 - -> so we are understanding the correct subset that we should check
 - -> the season / position that the players played in
 - -> checking for the column name / not checking for it
 - -> which columns we consider as duplicates
 - -> the value and position can be different
- -> **string handling**
 - -> some types of columns can have specific attributes
 - -> `str <- string`
 - -> `dtype columns <- .dt attributes`
 - -> `.cat attributes`
 - -> some have specific methods associated with the domains of the columns
 - -> some of the elements have a lot of methods
 - -> Python can use a split method
 - -> the str attribute in pandas
 - -> splitting the values by an underscore
 - -> then using the `expand = True` attribute to create a data frame out of this
 - -> contains regular or contains with regular database
 - -> we can fix this with regular expressions
- -> **question**

The Python method `.duplicated()` returns a boolean Series for your DataFrame. True is the return value for rows that:

- options
 - contain a duplicate, where the value for the row contains the first occurrence of that value.
 - contain a duplicate, where the value for the row is at least the second occurrence of that value. <- This one
 - contain a duplicate, where the value for the row contains either the first or second occurrence.