# Casting Data

# Casting Data with the *to_numeric()* MEthod

- In order to do numeric calculations (e.g. mean) on a DataFrame, the data type of the relevant columns need to be numeric

- Sometimes pandas will load data as a different data type, for example as an "object"
  - In this case, we need to cast the DataFrame to a numeric value

- To cast a DataFrame column to a numeric value, you can use the *to_numeric()* method

- For example, to cast the *salary* column in a DataFrame *df*
  ```
  df['salary'] = pd.to_numeric(df['salary'], errors='coerce')
  #The "errors" argument will catch (and ignore) any records where salary
  cannot be converted to a number
  ```

# Casting Data with the *astype()* Method

- In order to work with raw text in a DataFrame, the relevant columns need to be strings

  - An example of this would be, checking if a word appears in a column, or replacing specific text in a column

- Depending on the data type of the column, we may need to cast to a string

- To do this, you can use the *astype()* method

- For example, to cast the *description* column in a DataFrame *df*
  ```
  df['description'] = df['description'].astype(str)
  ```