Data Analysis with Python

Cheat Sheet: Importing Data Sets

```
Code Example
Package/Method Description
                                                     1. df = pd.read_csv(<CSV_path>, header = None)
                                                         # load without header
                                                         df = pd.read csv(<CSV path>, header = 0)
                                                         # load using first row as header
Read CSV data set Read the CSV file containing a
                   data set to a pandas data frame Copied!
                                                  Note: The labs in this course run in JupyterLite environment. In JupyterLite environment, you'll need to
                                                  download the required file to the local environment and then use the local path to the file as the CSV_path.
                                                  However, in case you are using JupyterLabs, or any other Python compiler on your local machine, you can use
                                                  the URL of the required file directly as the CSV_path.
                                                     1. 1
                   Print the first few entries
Print first few

    df.head(n) #n=number of entries; default 5

                   (default 5) of the pandas data
entries
                   frame
                                                   Copied!
                   Print the last few entries
Print last few

    df.tail(n) #n=number of entries; default 5

                   (default 5) of the pandas data
entries
                                                   Copied!
                                                     1. 1
Assign header
                   Assign appropriate header

    df.columns = headers

names
                   names to the data frame
                                                   Copied!
Replace "?" with
                   Replace the entries "?" with
                                                     1. df = df.replace("?", np.nan)
                   NaN entry from Numpy library
                                                   Copied!
                                                     1. 1
Retrieve data types data frame columns
                   Retrieve the data types of the

    df.dtypes

                                                   Copied!
                   Retrieve the statistical
                                                     1. 1
                   description of the data set.
Retrieve statistical Defaults use is for only
                                                     1. df.describe() #default use df.describe(include="all")
description
                   numerical data types. Use
                   include="all" to create
                                                   Copied!
                   summary for all variables
                                                     1. 1
                   Retrieve the summary of the
Retrieve data set
                   data set being used, from the
                                                     1. df.info()
summary
                   data frame
                                                   Copied!
                   Save the processed data frame
Save data frame to
                                                     1. df.to_csv(<output CSV path>)
                   to a CSV file with a specified
                                                   Copied!
```

