**Pandas**

1. **Loading Data with Pandas**

One way pandas allows us to work with data is through Dataframes. DataFrame automatically adds the first column as row indexes when created, and save the first row as keys to access columns.

import pandas as pd

dataframe = pd.read\_csv(<csv\_path>)

dataframe = pd.read\_excel(<xlsx\_path>)

dataframe.head() 🡪 Examine the first 5 rows of the data frame (exluding first row)

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A dataframe is comprised of rows and columns

🡪 We can index each cells (excluding first row and column), using

df\_name.iloc[row,column]

🡪 We can create a Dataframe out of a dictionary. We cast the data in the dictionary to the Dataframe by using

df\_name = DataFrame(<dict\_name>)

songs = {

‘Album’ : [‘Thriller’,’Back in Black’,’The Dark Side of the Moon’,’The Bodyguard’,‘Bat Out of Hell’], ‘Released’ : [1982,1980,1973,1992,1977],

‘Length’ : [’00:42:19’,’00:42:11’,’00:42:49’,’00:57:44’, ’00:46:33’]

}

songs\_frame = pd.DataFrame(songs)

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We can create a new DataFrame consisting of 1 (or many) column, by:

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1. **Working with and Saving Data**

* Finding unique elements in a column (no repetition)

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* We can also use operators on Dataframe cells.

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* To save this dataframe as a CSV file, use

df1.to\_csv(‘new\_songs.csv’)