# Terms and definitions from Course 3,

# Module 3

Categorical data: Data that is divided into a limited number of qualitative groups

**Collective outliers:** A group of abnormal points, following similar patterns and isolated from the rest of the population

**Contextual outliers:** Normal data points under certain conditions but become anomalies under most other conditions

**Data ethics**: Well-founded standards of right and wrong that dictate how data is collected, shared, and used

Data governance: A process for ensuring the formal management of a company's data assets

**Deduplication:** The elimination or removal of matching data values in a dataset

**Docstring:** (Refer to documentation string)

**Documentation string:** A group of text that explains what a method or function does; also referred to as a "docstring"

**Dummy variables:** Variables with values of 0 or 1 that indicate the presence or absence of something

**Global outliers:** Values that are completely different from the overall data group and have no association with any other outliers

**Heatmap:** A type of data visualization that depicts the magnitude of an instance or set of values based on two colors

**Input validation:** The practice of thoroughly analyzing and double-checking to make sure data is complete, error-free, and high quality

**Joining:** The process of augmenting data by adding values from other datasets; one of the six practices of EDA

**Label encoding:** Data transformation technique where each category is assigned a unique number instead of a qualitative value

Missing data: A data value that is not stored for a variable in the observation of interest

Non-null count: The total number of data entries for a data column that are not blank

**One-hot encoding**: A data transformation technique that turns one categorical variable into several binary variables

**Outliers:** Observations that are an abnormal distance from other values or an overall pattern in a data population

# Terms and definitions from previous

# modules

### В

**Bias**: In data structuring, bias refers to organizing data results in groupings, categories, or variables that are misrepresentative of the whole dataset

**Box plot:** A data visualization that depicts the locality, spread, and skew of groups of values within quartiles

## C

**Cleaning**: The process of removing errors that may distort your data or make it less useful; one of the six practices of Exploratory Data Analysis (EDA)

**CSV file**: A simple text file that can be easy to import or store in other softwares, platforms, and databases

D

Database (DB) file: A file type used to store data, often in tables, indexes, or fields

Data source: The location where data originates

Data visualization: A graph, chart, diagram, or dashboard that is created as a representation of

information

Discovering: The process data professionals use to familiarize themselves with the data so they

can start conceptualizing how to use it; one of the six practices of EDA

Ε

Exploratory data analysis (EDA): The process of investigating, organizing, and analyzing datasets

and summarizing their main characteristics, often by employing data wrangling and visualization

methods; the six main practices of EDA are: discovering, structuring, cleaning, joining, validating,

and presenting

Extracting: The process of retrieving data out of data sources for further data processing or storage

F

Filtering: The process of selecting a smaller part of a dataset based on specified values and using it

for viewing or analysis

**First-party data**: Data that was gathered from inside your own organization

G

**Grouping**: The process of aggregating individual observations of a variable into groups

Н

Hypothesis: A theory or an explanation, based on evidence, that is not yet proven true

П

**Info():** Gives the total number of entries, along with the data types—called Dtypes in pandas—of the individual entries

**Int64:** A standard integer data type, representing numbers somewhere between negative nine quintillion and positive nine quintillion

J

**Joining**: The process of augmenting data by adding values from other datasets; one of the six practices of EDA

JSON file: A data storage file that is saved in a JavaScript format

M

**Merging:** A method to combine two (or more) different data frames along a specified starting column(s)

P

**PACE**: A workflow data professionals can use to remain focused on the end goal of any given dataset; stands for plan, analyze, construct, and execute

**Presenting**: The process of making a cleaned dataset available to others for analysis or further modeling; one of the six practices of EDA

## S

**Second-party data:** Data that was gathered outside your organization but directly from the original source

**Slicing:** A method for breaking information down into smaller parts to facilitate efficient examination and analysis from different viewpoints

**Sorting:** The process of arranging data into a meaningful order for analysis

**String:** A sequence of characters and punctuation that contains textual information

**Structuring**: The process of taking raw data and organizing or transforming it to be more easily visualized, explained, or modeled; one of the six practices of EDA

### Т

Third-party data: Data gathered outside your organization and aggregated

#### V

**Validating**: The process of verifying that the data is consistent and high quality; one of the six practices of EDA

Go to next item

#### Completed