**TABLEAU ASSIGNMENT ANSWERS**

1. **Discrete data** is information that can only take certain values.

**Continuous data** is data that can take any value. ... Height, weight, temperature and length are all examples of continuous data.

2. Data fields are made from the columns in your data source. Each field is automatically assigned a data type (such as integer, string, date), and a role: **Discrete Dimension** or **Continuous Measure** (more common), or **Continuous Dimension** or **Discrete Measure** (less common).

**Dimensions** contain qualitative values (such as names, dates, or geographical data). You can use dimensions to categorize, segment, and reveal the details in your data. Dimensions affect the level of detail in the view.

**Measures** contain numeric, quantitative values that you can measure. Measures can be aggregated. When you drag a measure into the view, Tableau applies an aggregation to that measure (by default). Measure value is a function of one or more dimensions.

Generally, the measure is the number; the dimension is what you “slice and dice” the number by.

3**. Metadata** can be explained in a few ways:

* Data that **provide**[**information about other data**](http://www.merriam-webster.com/dictionary/metadata)**.**
* Metadata [summarizes basic information about data](http://whatis.techtarget.com/definition/metadata), making finding & working with particular instances of data easier.
* Metadata [can be created manually](http://whatis.techtarget.com/definition/metadata) to be more accurate, or automatically and contain more basic information.

**Workbooks** are used to package up Tableau visualizations which are called “Sheets” in the Metadata API and data models which are called “Embedded data sources” when they are owned by workbook.

4. The process of viewing numeric values or measures at higher and more summarized levels of the data is called **aggregation**. When we place a measure on a shelf, Tableau automatically aggregates the data, usually by summing it.

**Example:** Sales becomes SUM(Sales).

**Disaggregating** data allows to view every row of the data source which can be useful when analysing measures use both independently and dependently in the view.

**Example:** Analysing the results from a product satisfaction survey with the Age of participants along one axis.

We can aggregate the Age field to determine the average age of participants or disaggregate the data to determine at what age participants were most satisfied with the product.

5. Live and extracts are two ways that can make the data connection to the tableau.

**Live** allows real-time data while extracts are kind of batch which needs to be refreshed from time to time to get the updated data.

So, in case of **live connection** whatever changes will be done at the Datasource end that will be directly available to the tableau desktop.

While in case of **extracting** any changes made in the data source won't reflect in the report immediately. It will be reflected when the extract will be refreshed.

6. We can save our work using several different Tableau specific file types: workbooks, bookmarks, packaged data files, data extracts, and data connection files.

**Workbooks (.twb)** – Tableau workbook files have the .twb file extension. Workbooks hold one or more worksheets, plus zero or more dashboards and stories.

**Bookmarks (.tbm)** – Tableau bookmark files have the .tbm file extension. Bookmarks contain a single worksheet and are an easy way to quickly share our work.

**Packaged Workbooks (.twbx)** – Tableau packaged workbooks have the .twbx file extension. A packaged workbook is a single zip file that contains a workbook along with any supporting local file data and background images. This format is the best way to package our work for sharing with others who don’t have access to the original data.

**Extract ( .hyper or. tde)** – Depending on the version the extract was created; Tableau extract files can have either the .hyper or .tde file extension. Extract files are a local copy of a subset or entire data set that we can use to share data with others, when we need to work offline, and improve performance.

**Packaged Data Source (.tdsx)** – Tableau packaged data source files have the .tdsx file extension. A packaged data source is a zip file that contains the data source file (.tds) described above as well as any local file data such as extract files (. hyper or. tde), text files, Excel files, Access files, and local cube files. Use this format to create a single file that we can then share with others who may not have access to the original data stored locally on our computer.