**DAILY ASSESSMENT FORMAT**

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| **Course:** | **Coursera** | **USN:** | **4AL17EC040** |
| **Topic:** | **Basics Statistics** | **Semester & Section:** | **6th A** |
| **Github Repository:** | **Kavya\_ECE040** |  |  |

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| **FORENOON SESSION DETAILS** |
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| **Data and visualization** The first three videos form an introduction to the basics of **descriptive statistics**. We'll tell you why it makes sense to think about your data in terms of **cases**and **variables**, and we'll show you that the best way to order your cases and variables is by means of a **data matrix**. There are many different kinds of variables out there. To avoid confusion when we analyze them, we distinguish different **levels of measurement**.  When we present our data to others, we often summarize them by means of tables and/or graphs such as **frequency tables**, **pie charts**, **bar graphs**, **dot plots** and **histograms**. We'll also discuss various types of **distributions** of data.  Frequency table:  A **frequency table** is a method of organizing raw data in a compact form by displaying a series of scores in ascending or descending order, together with their **frequencies**—the number of times each score occurs in the respective data set.  Pie chart  A **pie chart** (or a circle **chart**) is a circular statistical graphic, which is divided into slices to illustrate numerical proportion. In a **pie chart**, the arc length of each slice (and consequently its central angle and area), is proportional to the quantity it represents.  Bar graph  A **bar** chart or **bar graph** is a chart or **graph** that presents categorical data with rectangular **bars** with heights or lengths proportional to the values that they represent. The **bars** can be plotted vertically or horizontally. A vertical **bar** chart is sometimes called a column chart.  Dot plot  A **Dot Plot**, also called a **dot** chart or strip **plot**, is a type of simple histogram-like chart used in statistics for relatively small data sets where values fall into a number of discrete bins (categories).  Histogram  A **histogram** is a graphical display of data using bars of different heights. In a **histogram**, each bar groups numbers into ranges. Taller bars show that more data falls in that range. A **histogram** displays the shape and spread of continuous sample data.  Mode, median and mean:  Mode: The **mode** is the number that appears most frequently in a data set. A set of numbers may have one **mode**, more than one **mode**, or no **mode** at all. Other popular measures of central tendency include the mean, or the average (mean) of a set, and the median, the middle value in a set  Median: The **median** is the middle number in a sorted, ascending or descending, list of numbers and can be more descriptive of that data set than the average. The **median** is sometimes used as opposed to the mean when there are outliers in the sequence that might skew the average of the values.  Mean: There are several kinds of mean in mathematics, especially in statistics. For a data set, the arithmetic mean, also called the expected value or average, is the central value of a discrete set of numbers: specifically, the sum of the values divided by the number of values. |