**DAILY ASSESSMENT FORMAT**

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| **Date:** | **22 july 2020** | **Name:** | **Niharika Narayana L** |
| **Course:** | **python** | **USN:** | **4AL17EC062** |
| **Topic:** | **How to develop pythonic coding rather than python coding** | **Semester & Section:** | **6th sem & ‘B’ sec** |

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| **FORENOON SESSION DETAILS (9.00am to 1.00pm)** |
| C:\Users\Hp\Desktop\report\22pyt22222.PNG  **Python is an interpreted, high-level, general-purpose programming language. Created by Guido van Rossum and first released in 1991, Python's design philosophy emphasizes code readability with its notable use of significant whitespace.**  **What is Python used for?**  **It's often used as a “scripting language” for web applications. This means that it can automate specific series of tasks, making it more efficient. Consequently, Python (and languages like it) is often used in software applications, pages within a web browser, the shells of operating systems and some games.**  **A tuple is a collection of objects which ordered and immutable. Tuples are sequences, just like lists. The differences between tuples and lists are, the tuples cannot be changed unlike lists and tuples use parentheses, whereas lists use square brackets.**  **Tuples are immutable which means you cannot update or change the values of tuple elements. You are able to take portions of existing tuples to create new tuples**  **The most basic data structure in Python is the sequence. Each element of a sequence is assigned a number - its position or index. The first index is zero, the second index is one, and so forth.**  **Python has six built-in types of sequences, but the most common ones are lists and tuples, which we would see in this tutorial.**  **There are certain things you can do with all sequence types. These operations include indexing, slicing, adding, multiplying, and checking for membership. In addition, Python has built-in functions for finding the length of a sequence and for finding its largest and smallest elements.** |

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| **Date:** | **22 july 2020** | **Name:** | **Niharika Narayana L** |
| **Course:** | **coursera** | **USN:** | **4AL17EC062** |
| **Topic:** | **Basic statistics** | **Semester & Section:** | **6th sem & ‘B’ Sec** |

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| **AFTERNOON SESSION DETAILS(2.00pm to 5.00pm)** |
| C:\Users\Hp\Desktop\report\22bas1111.PNG  C:\Users\Hp\Desktop\report\22bas2222.PNG  **There are few well know statistics are the average (or “mean”) value, and the “standard deviation” etc. Standard deviation is the variability within a data set around the mean value. The “variance” is the square of the standard deviation. The linear trend is another example of a data “statistic”.**  **Statistical methods involved in carrying out a study include planning, designing, collecting data, analysing, drawing meaningful interpretation and reporting of the research findings. The statistical analysis gives meaning to the meaningless numbers, thereby breathing life into a lifeless data.**  **Statistics is the discipline that concerns the collection, organization, analysis, interpretation and presentation of data. In applying statistics to a scientific, industrial, or social problem, it is conventional to begin with a**[**statistical population**](https://en.wikipedia.org/wiki/Statistical_population)**or a**[**statistical model**](https://en.wikipedia.org/wiki/Statistical_model)**to be studied. Populations can be diverse groups of people or objects such as "all people living in a country" or "every atom composing a crystal". Statistics deals with every aspect of data, including the planning of data collection in terms of the design of**[**surveys**](https://en.wikipedia.org/wiki/Statistical_survey)**and**[**experiments**](https://en.wikipedia.org/wiki/Experimental_design)**. See**[**glossary of probability and statistics**](https://en.wikipedia.org/wiki/Glossary_of_probability_and_statistics)**.**  **Two main statistical methods are used in**[**data analysis**](https://en.wikipedia.org/wiki/Data_analysis)**:**[**descriptive statistics**](https://en.wikipedia.org/wiki/Descriptive_statistics)**, which summarize data from a sample using**[**indexes**](https://en.wikipedia.org/wiki/Index_(statistics))**such as the**[**mean**](https://en.wikipedia.org/wiki/Mean)**or**[**standard deviation**](https://en.wikipedia.org/wiki/Standard_deviation)**, and**[**inferential statistics**](https://en.wikipedia.org/wiki/Statistical_inference)**, which draw conclusions from data that are subject to random variation (e.g., observational errors, sampling variation). Descriptive statistics are most often concerned with two sets of properties of a *distribution* (sample or population):**[***central tendency***](https://en.wikipedia.org/wiki/Central_tendency)**(or *location*) seeks to characterize the distribution's central or typical value, while**[***dispersion***](https://en.wikipedia.org/wiki/Statistical_dispersion)**(or *variability*) characterizes the extent to which members of the distribution depart from its center and each other. Inferences on**[**mathematical statistics**](https://en.wikipedia.org/wiki/Mathematical_statistics)**are made under the framework of**[**probability theory**](https://en.wikipedia.org/wiki/Probability_theory)**, which deals with the analysis of random phenomena.**  **Rejecting or disproving the null hypothesis is done using statistical tests that quantify the sense in which the null can be proven false, given the data that are used in the test. Working from a null hypothesis, two basic forms of error are recognized:**[**Type I errors**](https://en.wikipedia.org/wiki/Type_I_error)**(null hypothesis is falsely rejected giving a "false positive") and**[**Type II errors**](https://en.wikipedia.org/wiki/Type_II_error)**(null hypothesis fails to be rejected and an actual relationship between populations is missed giving a "false negative").**  **Measurement processes that generate statistical data are also subject to error. Many of these errors are classified as random (noise) or systematic (**[**bias**](https://en.wikipedia.org/wiki/Bias_(statistics))**), but other types of errors (e.g., blunder, such as when an analyst reports incorrect units) can also occur.** |