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| **Date:** | **25/5/2020** | **Name:** | **RACHANA C HULIKATTI** | |
| **Course:** | **DIGITAL SIGNAL PROCESSING** | **USN:** | **4AL17EC108** | |
| **Topic:** | |  | | --- | | 1. **Introduction to Fourier Series & Fourier Transform,** 2. **Fourier Series – Part 1,** 3. **Fourier Series – Part 2,** 4. **Inner Product in Hilbert Transform,** | | **Semester & Section:** | **6th-B** | |
| **GitHub Repository:** |  |  |  | |
| **FORENOON SESSION DETAILS** | | | | |
| **Image of session** | | | | |
| **Report – Report can be typed or hand written for up to two pages.**  **Introduction to Fourier Series & Fourier Transform:**   * **The Fourier Series is a specialized tool that allows for any periodic signal (subject to certain conditions) to be decomposed into an infinite sum of everlasting sinusoids.**   **2. Fourier transform:**   * **Digital Signal Processing/Discrete Fourier Transform. As the name implies, the Discrete Fourier Transform (DFT) is purely discrete: discrete-time data sets are converted into a discrete-frequency representation. This is in contrast to the DTFT that uses discrete time, but converts to continuous frequency.** * **Where f(x) is any function defined which contains a constant and frequently increasing elements in it.**   **Hilbert Transform**   * **The mathematical concept of a Hilbert space, named after David Hilbert, generalizes the notion of Euclidean space.** * **It extends the methods of vector algebra and calculus from the two-dimensional Euclidean plane and three-dimensional space to spaces with any finite or infinite number of dimensions.** * **A Hilbert space is an abstract vector space possessing the structure of an inner product that allows length and angle to be measured.** | | | | |
| **Date:** | **27-05-20** | **Name:** | | **RACHANA C HULIKATTI** |
| **Course:** | **UDEMY-The Python Mega Course: Build 10 real world applications** | **USN:** | | **4AL17EC108** |
| **Topic:** | 1. **Fixing Programming Errors** | **Semester & Section:** | | **6th-B** |
| **AFTERNOON SESSION DETAILS** | | | | |
| **Image of session** | | | | |
| **Report – Report can be typed or hand written for up to two pages.**  **Fixing Programming Errors:**   * **Invalid syntax: For example, we need to put proper parenthesis, indentations. “^” indicates where the error is occurring.** * **Handling exceptions: occurs between the try and except keywords has been executed.**   Runtime error: Every other error which is not an invalid syntax error is a Runtime error.   * **For example: divide by zero, type error, identifier error, trackback error.** * **After this section, we learnt on how to ask proper questions on errors.** * **To solve the runtime errors, we can copy paste the error onto the google or if the logic behind the error is known, it can be solved easily by ourselves** | | | | |