**DAILY ASSESSMENT FORMAT**

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| **Date:** | **27-05-2020** | **Name:** | **Bhavith** |
| **Course:** | **VLSI Design** | **USN:** | **4AL17EC009** |
| **Topic:** | **Boolean equations for digital circuits. Combinational circuits: Conversion of MUX and Decoders to logic gates,design of 7 segment decoder with common anode display** | **Semester & Section:** | **6th,A** |
| **Github Repository:** | **Bhavith-Online-Courses** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session**  **PSX_20200527_194040** |
| **Report – Report can be typed or hand written for up to two pages.**  **Boolean Equations:**   * **Boolean Algebra is an algebra, which deals with binary numbers & binary variables.** * **Hence, it is also called as Binary Algebra or logical Algebra.** * **A mathematician, named George Boole had developed this algebra in 1854.** * **The variables used in this algebra are also called as Boolean variables.** * **The range of voltages corresponding to Logic ‘High’ is represented with ‘1’ and the range of voltages corresponding to logic ‘Low’ is represented with ‘0’.**  BCD to 7 Segment Decoder:  * **In **Binary Coded Decimal (BCD)** encoding scheme each of the decimal numbers(0-9) is represented by its equivalent binary pattern(which is generally of 4-bits).** * **Whereas, **Seven segment** display is an electronic device which consists of seven Light Emitting Diodes (LEDs) arranged in a some definite pattern (common cathode or common anode type), which is used to display Hexadecimal numerals(in this case decimal numbers,as input is BCD i.e., 0-9).**   **Two types of seven segment LED display:**   1. ****Common Cathode Type:** In this type of display all cathodes of the seven LEDs are connected together to the ground or -Vcc(hence,common cathode) and LED displays digits when some ‘HIGH’ signal is supplied to the individual anodes.** 2. ****Common Anode Type:** In this type of display all the anodes of the seven LEDs are connected to battery or +Vcc and LED displays digits when some ‘LOW’ signal is supplied to the individual cathodes.** |

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| **Date:** | **27-05-2020** | **Name:** | **Bhavith** | |
| **Course:** | **Python** | **USN:** | **4AL17EC009** | |
| **Topic:** | **Interacting with databases,Build a desktop database application** | **Semester & Section:** | **6th,A** | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session**  **PSX_20200527_194014** | | | |
| **Report – Report can be typed or hand written for up to two pages.** Database Programming in Python:  * **From a construction firm to a stock exchange, every organisation depends on large databases.** * **These are essentially collections of tables, and’ connected with each other through columns.** * **These database systems support SQL, the Structured Query Language, which is used to create, access and manipulate the data.** * **SQL is used to access data, and also to create and exploit the relationships between the stored data.** * **Additionally, these databases support database normalisation rules for avoiding redundancy of data.** * **The [Python programming](https://electronicsforu.com/resources/cool-stuff-misc/collection-51-free-ebooks-python-programming" \t "https://opensourceforu.com/2019/04/database-programming-python/_blank) language has powerful features for database programming.** * **[Python](https://opensourceforu.com/2017/06/python-user-friendly-language-coding/" \t "https://opensourceforu.com/2019/04/database-programming-python/_blank) supports various databases like MySQL, Oracle, Sybase, PostgreSQL, etc.** * **Python also supports Data Definition Language (DDL), Data Manipulation Language (DML) and Data Query Statements.** * **For database programming, the Python DB API is a widely used module that provides a database application programming interface.** | | | |