**DAILY'S ASSESSMENT FORMAT**

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| **Date:** | **28/05/2020** | **Name:** | **Krishna Swetha** |
| **Course:** | **LOGIC DESIGN** | **USN:** | **4AL16EC032** |
| **Topic:** | **Boolean equations for digital circuits**  **Conversion of MUX and Decoders to logic gates.**  **design of 7 segment decoder with common anode display** | **Semester & Section:** | **6th Bsec** |
| **Github Repository:** | **Krishna-Swetha** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session** |
| **Report –**  **Boolean Algebra :**  **● In 1854 ,George Boole Developed an Algebraic System Called Boolean Algebra.**  **● Boolean Algebra is a System of Mathematical Logics.**  **● It is Defined With a set of Elements,a set of Operators and a Number of Postulates**  **Laws of Boolean Algebra:**  **● Commutative Law**  **X+Y=Y+X**  **A+B =B+A**  **X.Y=Y.X**  **A.B=B.A**  **● Associative Law**  **X+(Y+Z)=(X+Y)+3**  **A+(B+C)=(A+B)+C**  **X.(Y.Z)=(X.Y).Z**  **A.(B.C)=(A.B).C**  **● Distributive Law**  **X(Y+Z)=XY+YZ**  **A(B+C)=AB+AC**  **● Absorption Theorem**  **X+XY=X**  **A+AB=A**  **X+~XY=X+Y**  **MUX to Logic Gates Conversion:**  **1.NAND,NOR-Universal Gates**  **2.Universal Gates**  **3.MUX and Decoders are Called Universal Logic**  **Multiplexer is device which Selects one or Several Digital or Analog Inputs and It will Forward it to**  **the Output Line, Which is Single Output line.**  **BCD to SEVEN Segment Decoder.** |

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| **Date:** | **28/05/2020** | **Name:** | Krishna Swetha | |
| **Course:** | **PYTHON** | **USN:** | **4AL16EC032** | |
| **Topic:** | **Python for Image and Video**  **Processing with OpenCV**  **Build a Webcam**  **Motion Detector**  **Interactive Data Visualization**  **with Bokeh** | **Semester & Section:** | **6th Bsec** | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session** | | | |
| **Report – Report can be typed or hand written for up to two pages.**   * PIL is the Python Imaging Library which provides the python interpreter with image editing capabilities. It was developed by Fredrik Lundh and several other contributors. * The Python Imaging Library supports a wide variety of raster file formats. Over 30 different file formats can be identified and read by the library. Write support is less extensive, but most common interchange and presentation formats are supported. * Face detection is a computer vision technology that helps to locate/visualize human faces in digital images. * Pre-requisites. Hands-on knowledge of Numpy and Matplotlib is essential before working on the concepts of OpenCV. Make sure that you have the following packages installed and running before installing OpenCV. * OpenCV was started at Intel in the year 1999 by Gary Bradsky. The first release came a little later in the year 2000. * OpenCV was started at Intel in the year 1999 by Gary Bradsky. The first release came a little later in the year 2000. OpenCV essentially stands for Open Source Computer Vision Library. Although it is written in optimized C/C++, it has interfaces for Python and Java along with C++. OpenCV boasts of an active user base all over the world with its use increasing day by day due to the surge in computer vision applications. * Bokeh is a data visualization library for Python. Unlike Matplotlib and Seaborn, they are also Python packages for data visualization, Bokeh renders its plots using HTML and JavaScript. Hence, it proves to be extremely useful for developing web based dashboards. * The Bokeh project is sponsored by NumFocus also supports PyData, an educational program, involved in development of other important tools such as NumPy, Pandas and more. Bokeh can easily connect with these tools and produce interactive plots, dashboards and data applications. * Bokeh primarily converts the data source into a JSON file which is used as input for BokehJS, a JavaScript library, which in turn is written in TypeScript and renders the visualizations in modern browsers. | | | |