**DAILY ASSESSMENT FORMAT**

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| **Date:** | **28-05-2020** | **Name:** | **Yalpi Nandika** |
| **Course:** | **Logic Design** | **USN:** | **4AL17EC096** |
| **Topic:** | **Boolean equations for digital**  **circuits. Combinational circuits:**  **Conversion of MUX and Decoders to**  **logic gates.** | **Semester & Section:** | **6th & B** |
| **Github Repository:** | **Yalpi-Online-Courses** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session:**  **B**oolean 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  BCD to SEVEN Segment Decoder  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. |
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| **Date:** | **28-05-2020** | **Name:** | **Yalpi Nandika** | |
| **Course:** | **Python-Boot**  **camp for data analytics and ML** | **USN:** | **4AL17EC096** | |
| **Topic:** | **Linear Regression.** | **Semester & Section:** | **6th &B** | |
| **AFTERNOON SESSION DETAILS** | | | |
| ****Linear Regression Models -****  **The term "regression" generally refers to predicting a real number. However, it can also be used for classification (predicting a category or class.)**  **The term "linear" in the name “linear regression” refers to the fact that the method models data with linear combination of the explanatory variables.**  **A linear combination is an expression where one or more variables are scaled by a constant factor and added together.**  **In the case of linear regression with a single explanatory variable, the linear combination used in linear regression can be expressed as:**  **response = intercept + constant ∗ explanatory**  **In its most basic form fits a straight line to the response variable. The model is designed to fit a line that minimizes the squared differences (also called errors or residuals.).**  **Before we generate a model, we need to understand the degree of relationship between the attributes Y and X**  **Mathematically correlation between two variables indicates how closely their relationship follows a straight line. By default we use Pearson’s correlation which ranges between -1 and +1.**  **Correlation of extreme possible values of -1 and +1 indicate a perfectly linear relationship **between** X and Y whereas a correlation of 0 indicates absence of linear relationship**  **When r value is small, one needs to test whether it is statistically significant or not to believe that there is correlation or not.** | | | |
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