**Daily Assessment**

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| **Date:** | **09-06-2020** | **Name:** | **Prajwal Kamagethi Chakravarti P L** | |
| **Course:** | **Ki cad printed circuit board design** | **USN:** | **4AL17EC073** | |
| **Topic:** | **1.Start a new project**  **2.Netlist and footprint association** | **Semester &Section:** | **6th & B** | |
| **GitHub repository** | **https://www.github.com/alvas-education-foundation/Prajwal-Kamagethi.git** |  |  | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session**    **Report –**   * **The desigining process**  1. **Designing a circuit board consists of four main parts:**  * **Draw the schematic (circuit diagram)** * **Generate a netlist for the schematic** * **Lay out the circuit board** * **Generate Gerber files that are sent to the PCB manufacturer**    **Drawing the Schematic and Generating the Netlist:**  * **The schematic editor used to draw circuit diagrams in KiCad is called EESchema. Once the circuit diagram is drawn, a netlist is generated from it. This is done by simply clicking a button in EESchema.** * **The netlist contains information on all the components in the schematic and the connections between components.** * **The Netlist file is a file that contains information about the circuit, it’s components, associated footprints, labels and pin numbers and many other things.** * **Our PCBnew, which is the PCB editor, would read this file and load the appropriate footprints from the library and that will do the layout and wiring.** | | | |

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| **Date:** | **09-06-2020** | **Name:** | **Prajwal Kamagethi Chakravarti P L** | |
| **Course:** | **MySQL** | **USN:** | **4AL17EC073** | |
| **Topic:** | * **Outputting and processing data** * **Dealing with variables** * **Inserting and using database data** | **Semester &Section:** | **6th & B** | |
| **GitHub repository** | **https://www.github.com/alvas-education-foundation/Prajwal-Kamagethi.git** |  |  | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session**    **Report –** **What is MySQL?**  * **MySQL is a database system used for developing web-based software applications.** * **MySQL used for both small and large applications.** * **MySQL is a relational database management system (RDBMS).** * **MySQL is fast, reliable, and flexible and easy to use.** * **MySQL supports standard SQL (Structured Query Language).** * **MySQL is free to download and use.** * **MySQL was developed by Michael Widenius and David Axmark in 1994.** * **MySQL is presently developed, distributed, and supported by Oracle Corporation.** * **MySQL Written in C, C++.**   **A data processing system is a combination of**[**machines**](https://en.wikipedia.org/wiki/Machine)**, people, and processes that for a set of**[**inputs**](https://en.wikipedia.org/wiki/Input/output)**produces a defined set of**[**outputs**](https://en.wikipedia.org/wiki/Input/output)**. The inputs and outputs are interpreted as**[**data**](https://en.wikipedia.org/wiki/Data)**,**[**facts**](https://en.wikipedia.org/wiki/Fact)**,**[**information**](https://en.wikipedia.org/wiki/Information)**etc. depending on the interpreter's relation to the system.**  **A term commonly used synonymously with data processing system is**[**information system**](https://en.wikipedia.org/wiki/Information_systems#Types_of_information_systems)**. With regard particularly to**[**electronic data processing**](https://en.wikipedia.org/wiki/Electronic_data_processing)**, the corresponding concept is referred to as electronic data processing system.**  **A data processing system may involve some combination of:**   * [**Conversion**](https://en.wikipedia.org/wiki/Data_conversion)**converting data to another form or Language.** * [**Validation**](https://en.wikipedia.org/wiki/Data_validation)**– Ensuring that supplied data is "clean, correct and useful."** * [**Sorting**](https://en.wikipedia.org/wiki/Sorting)**– "arranging items in some sequence and in different sets."** * [**Summarization**](https://en.wikipedia.org/wiki/Summary_statistic)**– reducing detail data to its main points.** * [**Aggregation**](https://en.wikipedia.org/wiki/Aggregate_data)**– combining multiple pieces of data.** * [**Analysis**](https://en.wikipedia.org/wiki/Statistical_analysis)**– the "collection, organization, analysis, interpretation and presentation of data.".** * **Reporting – list detail or summary data or computed information.**   **Dealing with variables:** **MySQL variable assignment:** **There are two ways to assign a value to a user-defined variable.**  **The first way is to use the SET statement as follows:**   * **SET @variable\_name: = value;**   **You can use either: = or = as the assignment operator in the SET statement.**  **For example, the statement assigns number 100 to the variable @counter.**   * **SET @counter: = 100**   **The second way to assign a value to a variable is to use the**[**SELECT statement**](https://www.mysqltutorial.org/mysql-select-statement-query-data.aspx)**. In this case, you must use the: = assignment operator because, within the SELECT statement, MySQL treats the = operator as the equal operator.**   * **SELECT @variable\_name: = value**   **Inserting and using database data:**   * **The INSERT INTO statement is used to add new data to a database.** * **The INSERT INTO statement adds a new record to a table.** * **INSERT INTO can contain values for some or all of its columns. INSERT INTO can be combined with a SELECT to insert records**   **Here are some syntax rules to follow:**   * **The SQL query must be quoted in PHP** * **String values inside the SQL query must be quoted** * **Numeric values must not be quoted** * **The word NULL must not be quoted**  **Example (MySQL Object-oriented)** **<?php $servername = "localhost"; $username = "username"; $password = "password"; $dbname = "myDB";  // Create connection $conn = new mysqli($servername, $username, $password, $dbname); // Check connection if ($conn->connect\_error) {   die("Connection failed: " . $conn->connect\_error); }  $sql = "INSERT INTO MyGuests (firstname, lastname, email) VALUES ('John', 'Doe', 'john@example.com')";  if ($conn->query($sql) === TRUE) {   echo "New record created successfully"; } else {   echo "Error: " . $sql. "<br>". $conn->error; }  $conn->close (); ?>** | | | |