Daily Assessment format

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Usn 4AL17EC037

Date: 09/06/2020
course: pcb design
Topic: introduction, netlist & footprint
Github
repository: jyoti-course

Forenoon session details

Report
Day 1.
* start a new project: (tool → kicad)
file → new → project
after that give the name to the file
create a folder for kicad to save the work
• eschema → schematic editor
press k when window popsup.
• file → save → whole schematic project
• page setting → select the paper format
Revision → 0.1
give the title name
set company name
set comments
• place & component → click on the select window will popup we will get the library of components

select the component required & place it on the sheet
R key → Rotates
Netlist & footprint association & placing PCB
* Netlist & footprint
• After developing the ckt click on Run CV pcb to associate components & footprints.
• window will popup → ok
• select the types of the different components
• netlist → Read current netlist

what is kicad?

→ kicad is a free software suite for electronic design automation.

→ it facilitates the design of schematics for electronic ckts & their conversion to pcb designs.

→ kicad was originally developed by Jean-pierre charras

→ it features an integrated environment for schematic capture & pcb layout design.

Setting up a project

- ***pro** main project file to keep track of the file structure
- ***cmp** defines which footprints go with which schematic components
- ***kicad_pcb** the pcb layout
- ***sch** the schematic.

Editing the schematic

- a - to add components
- c - copy a component when the cursor is over another component
- w - to wire components
- v - edit component value
- Esc - Escape mode or whatever command in progress & return to normal pointer mode
- ***ctrl+z** undo. use liberally to undo any mistake
- ctrl+s → to save. make sure to save often.

Date: 09/06/2020

Name: Jyoti S. Donne
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Course: MySQL

Topic:
- outputting & processing data
- Dealing with variables
- inserting & using database data

Github repository: Jyoti-courses

Afternoon session details

Report

MySQL Loop

The loop_label before the loop statement for using with the iterate & leave statements. If the value of x is greater than 10, the loop is terminated because of the Leave statement. If the value of x is an odd number, the iterate ignores everything below it & starts a new loop iteration

```
DELIMETER $$
CREATE PROCEDURE Loop Demo()

BEGIN
    DECLARE x INT;
    DECLARE str VARCHAR(255);
    SET x=1;
    SET str='';
    loop_label:Loop
        IF x>10 THEN
            LEAVE loop_label;
        END IF
        SET x= x+1;
        IF (x mod 2) THEN
            ITERATE loop_label;
        ELSE
            SET str= CONCAT(str, x,',');
        END IF;
```

```
END Loop;
SELECT str;

END $$
```

Dealing with variables

to create a user-defined variable, we use the format @ variable_name, where the variable_name consists of alphanumeric characters. the max length of the user defined variable is 64 characters.

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;
```

Inserting & using database data

The INSERT statement allows you to insert one or more rows into a table. the following illustrates the syntax of INSERT statement.

```
INSERT INTO table(c1, c2, ...)
VALUES (v1, v2, ...);
```

IN this syntax

first, specify the table name & a list of comma-separated columns inside parentheses after the INSERT INTO clause. Then, put a comma-separated list of values of the corresponding columns inside the parentheses following the values keyword.

MySQL INSERT examples

```
CREATE TABLE IF NOT EXISTS tasks(
Task_id INT AUTO_INCREMENT,
    title VARCHAR(255) NOT NULL,
start_date DATE,
duedate DATE,
```

```
priority TINYINT NOT NULL DEFAULT 3,
description TEXT,
PRIMARY KEY(task_id)
);
```