01-Aug-2022 MySQLPractice:
********** **********

To create DataBase:
^^^^^^^^^^^^^^^^^

```
create database mukeshdb;
use mukeshdb;
```

==========

*****(MYSQL BASIC QUERY EXECUTION)*****
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

1.DDL
2.DML
3.DCL
4.TCL

Basic table creation:

1.DDL: CREATE ,ALTER ,DROP
****

```
CREATE TABLE COLLEGE
(
CHEIF VARCHAR (20),
PRINCIPAL VARCHAR(20),
HOD VARCHAR(20),
DEPARTMENT VARCHAR(20),
STUDENTS INT
);
```

ALTER QUERY :
****

#.by using an alter query we can add new attributes to the table

SYNTAX:
****

```
ALTER TABLE PERSON ADD AGE INT;
```

```
INSERT INTO PERSON(AADHARNO,FIRSTNAME,LASTNAME,CITY,JOB,AGE)
```

```
VALUES(333,'VIJAY','K','SOLINGANALLORE','DLS',23);

INSERT INTO PERSON(AADHARNO,FIRSTNAME,LASTNAME,CITY,JOB,AGE)
VALUES(111,'MUKESH','S','CHENNAI','WIPRO',21);

INSERT INTO PERSON(AADHARNO,FIRSTNAME,LASTNAME,CITY,JOB,AGE)
VALUES(222,'LOGESH','S','CHENNAI','VIRIZON',24);

SELECT * FROM PERSON;
==========================================================
DROP
******
  #.WE CAN USE TO DROPA A TABLE OR A SPECIFIC COLUMN

TO DROP A SPECIFIC COLUMN:
----------------------------------------------------
 ALTER TABLE PERSON DROP CITY;
 ========================================================
--------------------------------------------------------------------------------
  *** after creation we need to insert a values in the table
  --------------------------------------------------------------------------------
2.DML:-   SELECT INSERT UPDATE DELETE
**********************************************

INSERT INTO COLLEGE (CHEIF,PRINCIPAL,HOD,DEPARTMENT,STUDENTS)
 VALUES ('SUJIATHA','DEVA','GOWRI','CSE',44);

INSERT INTO COLLEGE (CHEIF,PRINCIPAL,HOD,DEPARTMENT,STUDENTS)
VALUES ('SUJIATHA','DEVA','VASAN','CIVIL',10);

INSERT INTO COLLEGE (CHEIF,PRINCIPAL,HOD,DEPARTMENT,STUDENTS)
VALUES ('SUJIATHA','DEVA','DB','ECE',66);

INSERT INTO COLLEGE (CHEIF,PRINCIPAL,HOD,DEPARTMENT,STUDENTS)
VALUES ('SUJIATHA','DEVA','RAJI','MECH',65);
```

```
UPDATE COLLEGE SET HOD='GOWRI MAM' ,STUDENTS=43 WHERE DEPARTMENT='CSE';

DELETE FROM COLLEGE WHERE DEPARTMENT='CIVIL';
```

3.DCL:- GRANT REVOKE
****
1. GRANT : ALLOW ANOTHER USER TO ACCESS THE DB.
2.REVOKE : TAKE BACK THE PERMISSION

==========

LOGICAL OPERATOR
****

```
CREATE TABLE PERSON
(
AADHARNO INT,
FIRSTNAME VARCHAR(20),
LASTNAME VARCHAR(29),
CITY VARCHAR(29),
JOB VARCHAR(38)
);

INSERT INTO PERSON(AADHARNO,FIRSTNAME,LASTNAME,CITY,JOB)
VALUES(111,'MUKESH','S','CHENNAI','WIPRO');

INSERT INTO PERSON(AADHARNO,FIRSTNAME,LASTNAME,CITY,JOB)
VALUES(222,'LOGESH','S','CHENNAI','VIRIZON');

INSERT INTO PERSON(AADHARNO,FIRSTNAME,LASTNAME,CITY,JOB)
VALUES(333,'VIJAY','K','SOLINGANALLORE','DLS');
```

```
select *from person;
==========================================================================
LOGICAL OPERATIONS :
**************************


1.AND
2.OR
3.NOT
---------------------------------------
AND   #.HAVE to satisfy both condition in where clause
******
SELECT AADHARNO ,FIRSTNAME,JOB FROM PERSON WHERE LASTNAME='S' AND CITY='CHENNAI';

AADHAR   FIRSTNAME     JOB
-----------------------------------------
111        MUKESH       WIPRO
222        LOGESH          VIRIZON
-----------------------------------------------
=======================================

OR     #.either one of condition can satisfy in where clause
******

SELECT AADHARNO ,FIRSTNAME,JOB FROM PERSON
WHERE LASTNAME='K' OR CITY='MUMBAI';

AADHARNO    FIRSTNAME    JOB
-------------------------------------------------
333              VIJAY          DLS
-------------------------------------------------
=============================================

NOT
*****
SELECT AADHARNO ,FIRSTNAME,JOB FROM PERSON
```

```
WHERE NOT  CITY='CHENNAI';

AADHARNO    FIRSTNAME    JOB
-------------------------------------------
333           VIJAY         DLS
===========================================

                      ORDER BY ;
                      **************
  #. EITHER IN ASCENDING ORDER OR DESENDING ORDER
-----------------
ASCENDING ORDER:
************************

SELECT * FROM PERSON ORDER BY AADHARNO ASC;

AADHARNO    FIRSTNAME    LASTNAME     CITY       JOB
-------------------------------------------------------------------------------
111           MUKESH         S          CHENNAI     WIPRO
222           LOGESH           S          NEW YORK   VIRIZON
333           VIJAY            K          SOLINGA     DLS
-------------------------------------------------------------------------------

DECENDING ORDER:
************************
SELECT * FROM PERSON ORDER BY AADHARNO DESC;

AADHARNO    FIRSTNAME    LASTNAME     CITY       JOB
-------------------------------------------------------------------------------
333           VIJAY            K          SOLINGA     DLS
222           LOGESH           S          NEW YORK   VIRIZON
111           MUKESH         S          CHENNAI     WIPRO
-------------------------------------------------------------------------------
```

==========

STRING FUNCTIONS:-

* **********

1.length of string
2.upper and lower()
3.trim,left trim and right trim
4.leftpad and right pad

QUERIES ARE:

#string functions

==========

1.upper and lower case:

****

#.returns our attribute based on upper and lower case:

```
select firstname,lower(firstname)as smLetter from person;
select city,lower(city)as smLetter from person;
select job,lower(job)as smLetter from person;

select firstname,upper(firstname)as capsletter from person;
```

2.length of string:

****

#.returns the length of attributes:

```
select firstname,length(firstname)as length from person;
select city ,length(city)as length from person;
select job,length(job)as length from person;
```

3.substring:

****

#.represent the attributes based on our desired index:

```
select firstname,substr(firstname,1,length(firstname)-3)as length from person;
output:
----------
muk
log
vi
```

4.InitCapital

****

#.used to make the first letter as capital:

```
select firstname,initcap(firstname)as firstletterasCapital from person;
```

5.trim:

****

#.defaultly remove the space from left and right side of the string

```
select firstname,trim(firstname)as spaceRemoved from person;
```

ltrim-removes left side of the space

---

rtrim-remove right side of the space

```
select length(ltrim("  elite  ")); ->7
select length(rtrim("    elite   ")); ->9
```

6.pad:

****

#.pad is used to append any string at left and right side of the string;

```
select city,rpad(city,10,"*") from person;
select city,lpad(city,10,"*") from person

--------------------------------------------------------------------------------
7,Reverse:
*************
   #.it reverse the each respective attribute from the table.

select job,reverse(job)as reversedStrings from person;

-------------------------------------------------------------------------------------------------------------

16-MAY-2022          AGGREGATE FUNCTION:
***************      ****************************

USED TO PERFORM SOME MATHEMATICAL OPERATIONS :
-----------------------------------------------------------------------------
1.AVERAGE :   AVG
2.MINIMUM  :   MIN
3.MAXIMUM :   MAX
4.TOATL     :   SUM
5.COUNT
-----------------------------
CREATE TABLE STUDENT
(
SID INT,
SNAME VARCHAR(20),
AGE int
);
INSERT INTO STUDENT (SID,SNAME,AGE)\
VALUES(1,'RAM',21);

INSERT INTO STUDENT (SID,SNAME,AGE)
VALUES(2,'SHAYAM',18);
```

```
INSERT INTO STUDENT (SID,SNAME,AGE)
VALUES(3,'SEETA',22);

INSERT INTO STUDENT (SID,SNAME,AGE)
VALUES(1,'GEETA',26);

SELECT * FROM STUDENT;

CREATE TABLE RESERVE
(
SID INT,
ISBN INT,
DAY int
);
INSERT INTO RESERVE (SID,ISBN,DAY) VALUES(1,005,01);
INSERT INTO RESERVE (SID,ISBN,DAY) VALUES(2,005,02);
INSERT INTO RESERVE (SID,ISBN,DAY) VALUES(3,007,03);
SELECT * FROM RESERVE;

CREATE TABLE BOOK
(
ISBN INT,
BNAME VARCHAR(20),
AUTHOR VARCHAR(20)
);
INSERT INTO BOOK (ISBN,BNAME,AUTHOR)
VALUES(005,'DBMS','AAA');

INSERT INTO BOOK (ISBN,BNAME,AUTHOR)
 VALUES(006,'OS','BBB');

INSERT INTO BOOK  (ISBN,BNAME,AUTHOR)
VALUES(007,'DAA','CCC');
```

SELECT * FROM BOOK;

SELECT COUNT(SID) FROM STUDENT;OUTPUT: 4

SELECT min(SID) FROM STUDENT; OUTPUT :1

SELECT max(AGE) FROM STUDENT;26

SELECT AVG(ISBN) FROM BOOK;3

SELECT SUM(ISBN) FROM BOOK;18

==========

03-Aug-2022 DATE FUNCTIONS:

********** **********

1.sysdate() : is used to return the current date ie systems date;

```
create database dateFunctions;
use dateFunctions;
```

```
    select sysdate();
       2022-08-03 12:42:29
```

2.now();

```
    select now();
       2022-08-03 12:54:37
```

3.currentdate() : just return the date only current

```
    select current_date();
       2022-08-03
-------------------------------------------------------------------------
4.currenttime() : just return a current time only
------------------------
    select current_time();
       12:54:37
-------------------------------------------------------------------------
5.current_user() : return current user name
-------------------------
   select current_user();
      root@localhost
-------------------------------------------------------------------------
6.dateadd() :  we can add a month or date or year from the current based on interval
-----------------
    select date_add(now(),interval(10) year);
       2032-08-03 13:11:16

   select date_add(now(),interval(10) month);
      2023-06-03 13:13:24

   select date_add(now(),interval(10) day);
      2022-08-13 13:14:17

      by specifying date:
     ***********************
     select date_add("2022-05-15",interval(10) day);
      2022-05-15
-------------------------------------------------------------------------------------------
7.datediff() : returns the differnce between two dates
-----------------
    select datediff("2022-05-15","2022-06-10");
     -26

   select datediff(now(),"2022-08-10");
```

-7

8.dateformatt :

---

select date_format(now(),"%W %Y %M %D");

Wednesday 2022 August 3rd
