**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***                    **\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**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)**

```sql
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
************************************************

```sql
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
--------------------------------------------------------------------------
```

05-Aug-2022          BETWEEN
**************          ***********

#.IT IS USED TO PRINT THE SPECIFIC RANGE OF THE NUMBER

select AADHARNO , FIRSTNAME from person where  aadharno not  between 222 and 333order by aadharno;

OUTPUT:
------------
 111     MUKESH
===========================================================

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);

```sql
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

======================================================

04-Aug-2022              GROUP BY
**************           *************
 #.group by is concept of grouping the attributes while removing the duplicates
 #.after grouping the attributes we can perform any operations like sum ,count and average

 select firstname,city,job from person group by job having job in('virizon','dls');
 output:
 -------------
 LOGESH    CHENNAI          VIRIZON
 VIJAY     SOLINGANALLORE     DLS


 select firstname,city,job from person group by job having job in('wipro');
 output:
 ----------
 MUKESH    CHENNAI WIPRO


 ----------------------------------------------------------------------------------------------
                     DISTINCT
                     ***********

```
    #.It doent allow the duplicates.
    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(1,'MUKESH','S','CHENNAI','WIPRO');

INSERT INTO PERSON(AADHARNO,FIRSTNAME,LASTNAME,CITY,JOB)
VALUES(2,'LOGESH','S','CHENNAI','VIRIZON');

INSERT INTO PERSON(AADHARNO,FIRSTNAME,LASTNAME,CITY,JOB)
VALUES(1,'VIJAY','K','SOLINGANALLORE','DLS');

query:-
---------
    select distinct aadharno from person order by AADHARNO desc;
output:
----------
    aadharno
    2
    1
```

============================================================
05-Aug-2022                LIKE-USAGE
**************                 ***************
__k%   represents the third charcter should be a k
example =mukesh,lokesh

%h    represents ends with h
example mukesh

a%   starts with a;
example apple


Query:
----------
   select FIRSTNAME from person where firstname like '%y' ;
output:
-----------
   vijay
---------------------------------------------------------------------------------------


==================================================================
                          **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;

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

=================================================
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
```

```
    **********************
    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
```

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




http://localhost:8080/greet

Hi