**02.Creating Database :**

create database publications

**03.Creating a Table :**

 CREATE TABLE classics (  
                                 author VARCHAR(128),  
                                 title VARCHAR(128),  
                                 type VARCHAR(16),  
                                 year CHAR(4)) ENGINE MyISAM;

**04. Date and Time .**

DATETIME '0000-00-00 00:00:00'  
                           DATE '0000-00-00'  
                           TIMESTAMP '0000-00-00 00:00:00'  
                           TIME '00:00:00'  
                            YEAR 0000 (Only years 0000 and 1901–2155)

**05. The  Auto\_increment data type :**

 ALTER TABLE classics ADD id INT NOT NULL AUTO\_INCREMENT KEY;

**06. Adding data to table  :**

INSERT INTO classics (author , title  , type , year)

                          VALUES ('Rabindranath', 'biser bani' , 'Stories', '2015');

**07. Rename Table :**

ALTER TABLE classics RENAME class

**08. Changing data type to a column :**

ALTER TABLE classics year MODIFY SMALLINT;

**09. Adding a new column :**

ALTER TABLE classics ADD pags SMINT UNSIGNED;

**10. Rename a column :**

ALTER TABLE classics CHANGE type category VARCHAR(16);

**11. Removing a column :**

ALTER TABLE classics DROP pages

**12. Creating, viewing, and deleting a table :**

CREATE TABLE classics;

                       DESCRIBE classic;

                       DROP TABLE classic;

                       SHOW tables;

**13. Index :**

ALTER TABLE classics ADD INDEX(author(20));

**14. Adding index when creating table :**

 INDEX(author(20)),  
                     INDEX(title(20)),  
                     INDEX(category(4)),  
                     INDEX(year)) ENGINE MyISAM;

**15. Primary key :**

ALTER TABLE classics ADD isbn CHAR(13) PRIMARY KEY;

**16. Creating a table class with a primary key :**

CREATE TABLE classics (  
                       author VARCHAR(128),  
                       title VARCHAR(128),  
                       category VARCHAR(16),  
                       year SMALLINT,  
                       isbn CHAR(13),  
                       INDEX(author(20)),  
                       INDEX(title(20)),  
                       INDEX(category(4)),  
                       INDEX(year),  
                       PRIMARY KEY (isbn)) ENGINE MyISAM;

**Date  : 23.08.2015**

**Today we  learn , Querying a Mysql Database :**

**01. Select :**

                  select author , title from classics;

                  select count(\*) from classics;

**02. Select Distinct :**

                  by using Distinct same type data can be displayed one time .

                  select DISTINCT author from classics;

**03. Delet :**

                 DELET FORM classics WHERE title = 'somrat';

**04. Where :**

                select author , title from classics whrer author = 'somrat' ;

**05. Limit :**

               select author, title from classics LIMIT  3;

**06. Match and Against :**

              SELECT author,title FROM classics  
              WHERE MATCH(author,title) AGAINST('and');  
              SELECT author,title FROM classics  
              WHERE MATCH(author,title) AGAINST('old shop');

**07. Match and Against in Boolean Mode :**

SELECT author,title FROM classics  
             WHERE MATCH(author,title)  
             AGAINST('+charles -species' IN BOOLEAN MODE);  
             SELECT author,title FROM classics  
             WHERE MATCH(author,title)  
             AGAINST('"origin of"' IN BOOLEAN MODE);

**08. Update and Set :**

UPDATE classics SET author = 'somrat' WHERE author = 'nazmul';

**09. Order by :**

select author , title from classics ORDER BY title DESC ;

          SELECT author,title,year FROM classics ORDER BY author,year DESC;

**10. Group by :**

  SELECT category,COUNT(author) FROM classics GROUP BY category;

**11. Joining Table :**

  SELECT name,author,title from customers,classics  
          WHERE customers.isbn=classics.isbn;

**12. Natural Join :**

SELECT name,author,title FROM customers NATURAL JOIN classics;

**13. Join On :**

SELECT name,author,title FROM customers  
           JOIN classics ON customers.isbn=classics.isbn;

**14. Using As :**

SELECT name,author,title from  
            customers AS cust, classics AS class  
            WHERE cust.isbn=class.isbn;

**15. Using Logical Operators .**

**Source code :**[https://github.com/somratcste/webtools](https://www.facebook.com/l.php?u=https%3A%2F%2Fgithub.com%2Fsomratcste%2Fwebtools&h=aAQHQpkiR&s=1)

**Date : 26.08.2015**

**Normalization :**   
The process of separating your data into tables and creating primary keys is called  
normalization.  
  
**Types :**   
1nf , 2nf , 3nf  
  
**1. First Normal form (1nf) :**  
--eliminate duplicate columns from the same tables   
--Create separate tables for each group of the related data and   
identify each row with a unique column or set of columns ( primary key).  
  
**2. Second Normal form(2nf) :**  
--Meet all the requirements of the first normal form.  
--Remove subsets of data that apply to multiple rows of a table and place them in separate tables.  
--Create relationships between these new tables and their predecessors through the use of foreign keys.   
  
**3. Third Normal Form (3nf) :**  
--Meet all the requirements of the second normal forms.  
--Remove columns that are not dependent upon the primary key.   
  
**Relationship :**  
There are three categories of relationships.  
  
**Types :**  
1. one to one :   
2. one to many :  
3. many to many :

**Source link :** [https://github.com/somratcste/webtools](https://www.facebook.com/l.php?u=https%3A%2F%2Fgithub.com%2Fsomratcste%2Fwebtools&h=ZAQHYrQBS&s=1)

**Date : 27.08.15**

**Today i have learned about many terms . Such as ..**

**1. Database and Anonymity .**

**2. Transaction and storage engine  :**

CREATE TABLE accounts (  
               number INT, balance FLOAT, PRIMARY KEY(number)  
              ) ENGINE InnoDB;

**3. Using Begin :**

         BEGIN;  
         UPDATE accounts SET balance=balance+25.11 WHERE number=12345;  
         COMMIT;  
         ELECT \* FROM accounts;

**4. Using Rollback :**

        ROLLBACK;  
        SELECT \* FROM accounts;

**5. Using Explain :**

EXPLAIN SELECT \* FROM accounts WHERE number='12345';

**6. Backup and Restoring .**