**TABLES CREATION**

create table users(

uid integer primary key,

fname varchar(20) not null,

lname varchar(20) not null,

email varchar(30) not null,

pctures integer not null

);

create table pictures(

pid integer primary key,

caption varchar(20),

ppath varchar(30) not null,

posting\_date date not null,

posting\_day varchar(10) not null,

uid integer not null,

tagged varchar(30)

);

alter table pictures add constraint fk1 foreign key(uid) references users(uid);

create table likes(

uid integer not null,

pid integer not null,

userlikes integer not null

);

alter table likes add constraint fk2 foreign key(uid) references users(uid);

alter table likes add constraint fk3 foreign key(pid) references pictures(pid);

**DESCRIPTION OF TABLES**

desc users;

+---------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+-------------+------+-----+---------+-------+

| uid | int(11) | NO | PRI | NULL | |

| fname | varchar(20) | NO | | NULL | |

| lname | varchar(20) | NO | | NULL | |

| email | varchar(30) | NO | | NULL | |

| pctures | int(11) | NO | | NULL | |

+---------+-------------+------+-----+---------+-------+

desc pictures;

+--------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+--------------+-------------+------+-----+---------+-------+

| pid | int(11) | NO | PRI | NULL | |

| caption | varchar(20) | YES | | NULL | |

| ppath | varchar(30) | NO | | NULL | |

| posting\_date | date | NO | | NULL | |

| posting\_day | varchar(10) | NO | | NULL | |

| uid | int(11) | NO | MUL | NULL | |

| tagged | varchar(30) | YES | | NULL | |

+--------------+-------------+------+-----+---------+-------+

desc likes;

+-----------+---------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-----------+---------+------+-----+---------+-------+

| uid | int(11) | NO | MUL | NULL | |

| pid | int(11) | NO | MUL | NULL | |

| userlikes | int(11) | NO | | NULL | |

+-----------+---------+------+-----+---------+-------+

**TABLES AFTER INSERTION**

select \* from users;

+-----+---------+-----------+---------------+---------+

| uid | fname | lname | email | pctures |

+-----+---------+-----------+---------------+---------+

| 1 | amrutha | lakshmi | abc@gmail.com | 2 |

| 2 | sri | vidya | sv@gmail.com | 4 |

| 3 | naga | swaroopa | ns@gmail.com | 3 |

| 4 | padma | kanthi | pdk@gmail.com | 8 |

| 5 | deva | harshitha | dv@gmail.com | 5 |

+-----+---------+-----------+---------------+---------+

select \* from pictures;

+-----+-------------------+---------+--------------+-------------+-----+-------------+

| pid | caption | ppath | posting\_date | posting\_day | uid | tagged |

+-----+-------------------+---------+--------------+-------------+-----+-------------+

| 1 | values in art | c-drive | 2018-09-09 | tuesday | 1 | art |

| 2 | values in art | c-drive | 2017-06-01 | thursday | 4 | art |

| 3 | themes of history | d-drive | 2018-04-16 | monday | 1 | history |

| 4 | skill in music | d-drive | 2000-03-29 | friday | 5 | music |

| 5 | null | e-drive | 2010-07-24 | wednesday | 3 | music |

| 6 | techonology | d-drive | 2016-08-30 | sunday | 2 | science |

| 7 | engineers day | c-drive | 2017-07-06 | tuesday | 1 | engineering |

| 8 | techonology | d-drive | 2016-09-26 | friday | 3 | null |

| 9 | beauty of history | c-drive | 2018-08-02 | saturday | 2 | history |

| 10 | null | d-drive | 2016-04-25 | monday | 1 | empty |

+-----+-------------------+---------+--------------+-------------+-----+-------------+

select \* from likes;

+-----+-----+-----------+

| uid | pid | userlikes |

+-----+-----+-----------+

| 1 | 2 | 5 |

| 2 | 1 | 3 |

| 3 | 6 | 5 |

| 4 | 8 | 0 |

| 5 | 9 | 3 |

| 1 | 7 | 9 |

| 5 | 2 | 6 |

| 2 | 2 | 6 |

| 5 | 3 | 3 |

+-----+-----+-----------+

**QUERIES**

**1.Display Picture ids of pictures posted by user id "1"**

select pid from pictures where uid=1;

+-----+

| pid |

+-----+

| 1 |

| 3 |

| 7 |

| 10 |

+-----+

**2.Display captions of pictures posted by "2". Display 'No caption' if caption is not having any value.**

select ifnull(caption,'NO CAPTION') as CAPTION from pictures where uid=2;

+-------------------+

| CAPTION |

+-------------------+

| techonology |

| beauty of history |

+-------------------+

**3.Which pictures (picture ids) and by which users (user ids) have been posted in last 1 year?**

select pid,uid from pictures where year(posting\_date)=2017;

+-----+-----+

| pid | uid |

+-----+-----+

| 2 | 4 |

| 7 | 1 |

+-----+-----+

**4.Which picture/s (picture ids) has received maximum likes?**

select pid from likes where userlikes=(select max(userlikes) from likes);

+-----+

| pid |

+-----+

| 7 |

+-----+

**5.Display all picture ids in descending order of the likes they have got. Also display total no. of likes each picture has received**

select pid,userlikes from likes order by userlikes desc;

+-----+-----------+

| pid | userlikes |

+-----+-----------+

| 7 | 9 |

| 2 | 6 |

| 2 | 6 |

| 2 | 5 |

| 6 | 5 |

| 1 | 3 |

| 9 | 3 |

| 3 | 3 |

| 8 | 0 |

+-----+-----------+

**6.Display picture ids of pictures with more than 3 likes.**

select distinct(pid) from likes where userlikes>3;

+-----+

| pid |

+-----+

| 2 |

| 6 |

| 7 |

+-----+

**7.Who (user id) has liked the most pictures?**

select uid from likes where userlikes=(select max(userlikes) from likes);

+-----+

| uid |

+-----+

| 1 |

+-----+

**8.Which day of the week users are posting the maximum no. of pictures**

**9.Get the count of pictures posted during weekends.**

select count(pid) from pictures where (posting\_day='saturday')or(posting\_day='sunday');

+------------+

| count(pid) |

+------------+

| 2 |

+------------+

**10.Find pictures (picture ids) with more than 3 tags.**

select pid from pictures group by pid having count(tagged)>3;

Empty set (0.06 sec)

**11.Display pictures with "London" in their caption. Do case insensitive search.**

select pid from pictures where caption like '%london%';

Empty set (0.08 sec)

**12.Which pictures (picture ids) are stored on my "D:" drive?**

select pid from pictures where ppath='d-drive';

+-----+

| pid |

+-----+

| 3 |

| 4 |

| 6 |

| 8 |

| 10 |

+-----+

**13.Display year, pic\_id of pictures posted by User id -3 in last 5 years.**

select pid,year(posting\_date) as year from pictures where year(posting\_date)>=2013 and uid=3;

+-----+------+

| pid | year |

+-----+------+

| 8 | 2016 |

+-----+------+

**14.Display first and last names of all users who have either have an account on gmail or yahoo.**

select fname,lname from users where email like '%gmail%' or '%yahoo%';

+---------+-----------+

| fname | lname |

+---------+-----------+

| amrutha | lakshmi |

| sri | vidya |

| naga | swaroopa |

| padma | kanthi |

| deva | harshitha |

+---------+-----------+

**15.Add new user with user-name, his first & last name and email.**

insert into users values(6,'sai','likhitha','sk@gmail.com',2);

mysql> select \* from users;

+-----+---------+-----------+---------------+---------+

| uid | fname | lname | email | pctures |

+-----+---------+-----------+---------------+---------+

| 1 | amrutha | lakshmi | abc@gmail.com | 2 |

| 2 | sri | vidya | sv@gmail.com | 4 |

| 3 | naga | swaroopa | ns@gmail.com | 3 |

| 4 | padma | kanthi | pdk@gmail.com | 8 |

| 5 | deva | harshitha | dv@gmail.com | 5 |

| 6 | sai | likhitha | sk@gmail.com | 2 |

+-----+---------+-----------+---------------+---------+

**16.Add a like for Picture id 6 by user id 7.**

update likes set userlikes=userlikes+1 where pid=6 and uid=7;

Query OK, 0 rows affected (0.05 sec)

Rows matched: 0 Changed: 0 Warnings: 0

mysql> select \* from likes;

+-----+-----+-----------+

| uid | pid | userlikes |

+-----+-----+-----------+

| 1 | 2 | 5 |

| 2 | 1 | 3 |

| 3 | 6 | 5 |

| 4 | 8 | 0 |

| 5 | 9 | 3 |

| 1 | 7 | 9 |

| 5 | 2 | 6 |

| 2 | 2 | 6 |

| 5 | 3 | 3 |

+-----+-----+-----------+

**17.Delete all likes done by user id '3'.**

update likes set userlikes=0 where uid=3;

mysql> select \* from likes;

+-----+-----+-----------+

| uid | pid | userlikes |

+-----+-----+-----------+

| 1 | 2 | 5 |

| 2 | 1 | 3 |

| 3 | 6 | 0 |

| 4 | 8 | 0 |

| 5 | 9 | 3 |

| 1 | 7 | 9 |

| 5 | 2 | 6 |

| 2 | 2 | 6 |

| 5 | 3 | 3 |

+-----+-----+-----------+

insert into users values(9,'sai','kartheek','skl@gmail.com',1),(8,'angella','smith','as@gmail.com',3);

mysql> select \*from users;

+-----+---------+-----------+---------------+---------+

| uid | fname | lname | email | pctures |

+-----+---------+-----------+---------------+---------+

| 1 | amrutha | lakshmi | abc@gmail.com | 2 |

| 2 | sri | vidya | sv@gmail.com | 4 |

| 3 | naga | swaroopa | ns@gmail.com | 3 |

| 4 | padma | kanthi | pdk@gmail.com | 8 |

| 5 | deva | harshitha | dv@gmail.com | 5 |

| 6 | sai | likhitha | sk@gmail.com | 2 |

| 8 | angella | smith | as@gmail.com | 3 |

| 9 | sai | kartheek | skl@gmail.com | 1 |

+-----+---------+-----------+---------------+---------+

**18.Update last name for user id '9' to 'Kumar'.**

update users set lname='kumar' where uid=9;

mysql> select \*from users;

+-----+---------+-----------+---------------+---------+

| uid | fname | lname | email | pctures |

+-----+---------+-----------+---------------+---------+

| 1 | amrutha | lakshmi | abc@gmail.com | 2 |

| 2 | sri | vidya | sv@gmail.com | 4 |

| 3 | naga | swaroopa | ns@gmail.com | 3 |

| 4 | padma | kanthi | pdk@gmail.com | 8 |

| 5 | deva | harshitha | dv@gmail.com | 5 |

| 6 | sai | likhitha | sk@gmail.com | 2 |

| 8 | angella | smith | as@gmail.com | 3 |

| 9 | sai | kumar | skl@gmail.com | 1 |

+-----+---------+-----------+---------------+---------+

**19.Update email address of User "Angella Smith"to asmith@gmail.com.**

update users set email='asmith@gmail.com' where fname='angella' and lname='smith';

mysql> select \*from users;

+-----+---------+-----------+------------------+---------+

| uid | fname | lname | email | pctures |

+-----+---------+-----------+------------------+---------+

| 1 | amrutha | lakshmi | abc@gmail.com | 2 |

| 2 | sri | vidya | sv@gmail.com | 4 |

| 3 | naga | swaroopa | ns@gmail.com | 3 |

| 4 | padma | kanthi | pdk@gmail.com | 8 |

| 5 | deva | harshitha | dv@gmail.com | 5 |

| 6 | sai | likhitha | sk@gmail.com | 2 |

| 8 | angella | smith | asmith@gmail.com | 3 |

| 9 | sai | kumar | skl@gmail.com | 1 |

+-----+---------+-----------+------------------+---------+

**20.Add a new tag for "Literature".**

update pictures set tagged='literature' where pid=6;

mysql> select \*from pictures;

+-----+-------------------+---------+--------------+-------------+-----+-------------+

| pid | caption | ppath | posting\_date | posting\_day | uid | tagged |

+-----+-------------------+---------+--------------+-------------+-----+-------------+

| 1 | values in art | c-drive | 2018-09-09 | tuesday | 1 | art |

| 2 | values in art | c-drive | 2017-06-01 | thursday | 4 | art |

| 3 | themes of history | d-drive | 2018-04-16 | monday | 1 | history |

| 4 | skill in music | d-drive | 2000-03-29 | friday | 5 | music |

| 5 | null | e-drive | 2010-07-24 | wednesday | 3 | music |

| 6 | techonology | d-drive | 2016-08-30 | sunday | 2 | literature |

| 7 | engineers day | c-drive | 2017-07-06 | tuesday | 1 | engineering |

| 8 | techonology | d-drive | 2016-09-26 | friday | 3 | null |

| 9 | beauty of history | c-drive | 2018-08-02 | saturday | 2 | history |

| 10 | null | d-drive | 2016-04-25 | monday | 1 | empty |

+-----+-------------------+---------+--------------+-------------+-----+-------------+