**To set Pass/Fail:**

mysql> use student;

Database changed

mysql> update

   -> results

   -> set

   -> status=case when result='1' then 'Pass'

   -> when result='0' then 'Fail'

   -> else status

   -> end

   -> where result in('1','0');

Query OK, 6 rows affected (0.05 sec)

Rows matched: 6  Changed: 6  Warnings: 0

mysql> select \* from results;

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

| result\_id | stud\_id | course\_id | subject\_code | grade | result | status |

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

|       601 |     101 |       401 |          511 | A     |      1 | Pass   |

|       601 |     101 |       401 |          513 | E     |      0 | Fail   |

|       602 |     102 |       403 |          512 | A     |      1 | Pass   |

|       602 |     102 |       403 |          514 | C     |      1 | Pass   |

|       603 |     103 |       402 |          512 | E     |      0 | Fail   |

|       603 |     103 |       402 |          514 | E     |      0 | Fail   |

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

6 rows in set (0.00 sec)

**Total Pass/Fail percentage:**

Mysql> select result,count(result) as count,(count(result)/(select count(result) from results)) \* 100 as percentage from results group by result;

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

| result | count | percentage |

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

| 0 | 2 | 33.3333 |

| 1 | 4 | 66.6667 |

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

2 rows in set (0.00 sec)

mysql> select status,(count(status)\*100/(select count(\*) from results)) as percentage from results where status='Pass' group by status;

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

| status | percentage |

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

| Pass | 66.6667 |

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

1 row in set (0.00 sec)

mysql> select status,(count(status)\*100/(select count(\*) from results)) as percentage from results where status='Fail' group by status;

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

| status | percentage |

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

| Fail | 33.3333 |

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

1 row in set (0.00 sec)

**Total Pass/Fail Percentage of a Education Year:**

mysql> select status,academic\_year,(count(status)\*100/(select count(\*) from results)) as percentage from results inner join stud\_master on results.stud\_id=stud\_master.stud\_id where status='Pass' and stud\_master.academic\_year=2009 group by status;

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

| status | academic\_year | percentage |

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

| Pass | 2009 | 33.3333 |

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

1 row in set (0.00 sec)

**Percentage of a Student:**

mysql> select stud\_id,(sum(mark)/count(mark)) as Percentage from results group by stud\_id;

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

| stud\_id | Percentage |

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

| 101 | 62.5000 |

| 102 | 75.0000 |

| 103 | 50.0000 |

| 104 | 75.0000 |

| 105 | 32.5000 |

| 106 | 52.5000 |

| 107 | 75.0000 |

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

7 rows in set (0.00 sec)

mysql> select stud\_id,(sum(mark)/count(mark)) as Percentage from results where stud\_id=101 group by stud\_id;

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

| stud\_id | Percentage |

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

| 101 | 62.5000 |

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

1 row in set (0.00 sec)

**To Get First 3 Ranks:**

mysql> select stud\_id,(sum(mark)/count(mark)) as Percentage from results group by stud\_id order by Percentage desc limit 3;

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

| stud\_id | Percentage |

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

| 104 | 75.0000 |

| 107 | 75.0000 |

| 102 | 75.0000 |

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

3 rows in set (0.00 sec)

**Where clause:**

mysql> select stud\_id,course\_id,subject\_code,grade,status from results where result=1;

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

| stud\_id | course\_id | subject\_code | grade | status |

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

|     101 |       401 |          511 | A     | Pass   |

|     102 |       403 |          512 | A     | Pass   |

|     102 |       403 |          514 | C     | Pass   |

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

3 rows in set (0.00 sec)

mysql> select stud\_reg\_no,stud\_name,admission\_date,course\_id,subject\_code,grade,status from stud\_master,results where stud\_master.stud\_id=results.stud\_id;

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

| stud\_reg\_no | stud\_name | admission\_date | course\_id | subject\_code | grade | status |

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

|         811 | aaa       | 2009-07-22     |       401 |          511 | A     | Pass   |

|         811 | aaa       | 2009-07-22     |       401 |          513 | E     | Fail   |

|         812 | bbb       | 2012-08-20     |       403 |          512 | A     | Pass   |

|         812 | bbb       | 2012-08-20     |       403 |          514 | C     | Pass   |

|         813 | ccc       | 2015-05-13     |       402 |          512 | E     | Fail   |

|         813 | ccc       | 2015-05-13     |       402 |          514 | E     | Fail   |

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

6 rows in set (0.00 sec)

**OR Operator:**

mysql> select stud\_id,course\_id,subject\_code,grade,status from results where result=1 or result=0;

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

| stud\_id | course\_id | subject\_code | grade | status |

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

|     101 |       401 |          511 | A     | Pass   |

|     101 |       401 |          513 | E     | Fail   |

|     102 |       403 |          512 | A     | Pass   |

|     102 |       403 |          514 | C     | Pass   |

|     103 |       402 |          512 | E     | Fail   |

|     103 |       402 |          514 | E     | Fail   |

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

6 rows in set (0.00 sec)

**AND Operator:**

mysql> select stud\_id,course\_id,subject\_code,grade,status from results where result=1 and course\_id=401;

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

| stud\_id | course\_id | subject\_code | grade | status |

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

|     101 |       401 |          511 | A     | Pass   |

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

1 row in set (0.00 sec)

**Like Clause:**

mysql> select \* from results where course\_id like '40%';

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

| result\_id | stud\_id | course\_id | subject\_code | grade | result | status |

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

|       601 |     101 |       401 |          511 | A     |      1 | Pass   |

|       601 |     101 |       401 |          513 | E     |      0 | Fail   |

|       602 |     102 |       403 |          512 | A     |      1 | Pass   |

|       602 |     102 |       403 |          514 | C     |      1 | Pass   |

|       603 |     103 |       402 |          512 | E     |      0 | Fail   |

|       603 |     103 |       402 |          514 | E     |      0 | Fail   |

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

6 rows in set (0.00 sec)

**Top Clause:**

mysql> select \* from results limit 3;

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

| result\_id | stud\_id | course\_id | subject\_code | grade | result | status |

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

|       601 |     101 |       401 |          511 | A     |      1 | Pass   |

|       601 |     101 |       401 |          513 | E     |      0 | Fail   |

|       602 |     102 |       403 |          512 | A     |      1 | Pass   |

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

3 rows in set (0.00 sec)

**Order By:**

mysql> select \* from results order by result\_id desc;

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

| result\_id | stud\_id | course\_id | subject\_code | grade | result | status |

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

|       603 |     103 |       402 |          512 | E     |      0 | Fail   |

|       603 |     103 |       402 |          514 | E     |      0 | Fail   |

|       602 |     102 |       403 |          512 | A     |      1 | Pass   |

|       602 |     102 |       403 |          514 | C     |      1 | Pass   |

|       601 |     101 |       401 |          511 | A     |      1 | Pass   |

|       601 |     101 |       401 |          513 | E     |      0 | Fail   |

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

6 rows in set (0.00 sec)

**Group By:**

mysql> select stud\_name,father\_name from stud\_master group by father\_name;

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

| stud\_name | father\_name |

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

| ccc       | mmm         |

| aaa       | sss         |

| bbb       | yyy         |

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

3 rows in set (0.03 sec)

**Distinct Keyword:**

mysql> select subject\_code from results order by subject\_code;

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

| subject\_code |

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

|          511 |

|          512 |

|          512 |

|          513 |

|          514 |

|          514 |

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

6 rows in set (0.00 sec)

mysql> select distinct subject\_code from results order by subject\_code;

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

| subject\_code |

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

|          511 |

|          512 |

|          513 |

|          514 |

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

4 rows in set (0.00 sec)

**Sorting Results:**

mysql> select \* from stud\_master order by(case stud\_id

   -> when 101 then 1

   -> else 100 end)asc, stud\_id desc;

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

| stud\_id | stud\_reg\_no | stud\_name | dob        | father\_name | mother\_name | blood\_group | admission\_date |

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

|     101 |         811 | aaa       | 1992-09-23 | sss         | rrr         | B+ve        | 2009-07-22     |

|     103 |         813 | ccc       | 1995-01-02 | mmm         | jjj         | A+ve        | 2015-05-13     |

|     102 |         812 | bbb       | 1990-07-10 | yyy         | lll         | O+ve        | 2012-08-20     |

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

3 rows in set (0.00 sec)

**Inner Join:**

mysql> select stud\_reg\_no,stud\_name,dob,admission\_date,course\_id,subject\_code,grade,result,status from stud\_master inner join results on stud\_master.stud\_id=results.stud\_id where result=1;

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

| stud\_reg\_no | stud\_name | dob | admission\_date | course\_id | subject\_code | grade | result | status |

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

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 511 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 512 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 514 | C | 1 | Pass |

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

3 rows in set (0.08 sec)

**Left Join:**

mysql> select stud\_reg\_no,stud\_name,dob,admission\_date,course\_id,subject\_code,grade,result,status from stud\_master left join results on stud\_master.stud\_id=results.stud\_id;

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

| stud\_reg\_no | stud\_name | dob | admission\_date | course\_id | subject\_code | grade | result | status |

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

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 511 | A | 1 | Pass |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 513 | E | 0 | Fail |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 512 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 514 | C | 1 | Pass |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 512 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 514 | E | 0 | Fail |

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

6 rows in set (0.00 sec)

**Right Join:**

mysql> select stud\_reg\_no,stud\_name,dob,admission\_date,course\_id,subject\_code,grade,result,status from stud\_master right join results on stud\_master.stud\_id=results.stud\_id;

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

| stud\_reg\_no | stud\_name | dob | admission\_date | course\_id | subject\_code | grade | result | status |

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

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 511 | A | 1 | Pass |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 513 | E | 0 | Fail |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 512 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 514 | C | 1 | Pass |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 512 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 514 | E | 0 | Fail |

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

6 rows in set (0.00 sec)

**Full Join:**

mysql> select stud\_reg\_no,stud\_name,dob,admission\_date,course\_id,subject\_code,grade,result,status from stud\_master left join results on stud\_master.stud\_id=results.stud\_id

-> union all

-> select stud\_reg\_no,stud\_name,dob,admission\_date,course\_id,subject\_code,grade,result,status from stud\_master right join results on stud\_master.stud\_id=results.stud\_id;

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

| stud\_reg\_no | stud\_name | dob | admission\_date | course\_id | subject\_code | grade | result | status |

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

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 511 | A | 1 | Pass |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 513 | E | 0 | Fail |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 512 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 514 | C | 1 | Pass |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 512 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 514 | E | 0 | Fail |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 511 | A | 1 | Pass |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 513 | E | 0 | Fail |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 512 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 514 | C | 1 | Pass |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 512 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 514 | E | 0 | Fail |

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

12 rows in set (0.00 sec)

**Cartesian Join:**

mysql> select stud\_reg\_no,stud\_name,dob,admission\_date,course\_id,subject\_code,grade,result,status from stud\_master,results;

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

| stud\_reg\_no | stud\_name | dob | admission\_date | course\_id | subject\_code | grade | result | status |

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

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 511 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 401 | 511 | A | 1 | Pass |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 401 | 511 | A | 1 | Pass |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 401 | 513 | E | 0 | Fail |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 401 | 513 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 401 | 513 | E | 0 | Fail |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 403 | 512 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 512 | A | 1 | Pass |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 403 | 512 | A | 1 | Pass |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 403 | 514 | C | 1 | Pass |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 403 | 514 | C | 1 | Pass |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 403 | 514 | C | 1 | Pass |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 402 | 512 | E | 0 | Fail |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 402 | 512 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 512 | E | 0 | Fail |

| 811 | aaa | 1992-09-23 | 2009-07-22 | 402 | 514 | E | 0 | Fail |

| 812 | bbb | 1990-07-10 | 2012-08-20 | 402 | 514 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 2015-05-13 | 402 | 514 | E | 0 | Fail |

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

18 rows in set (0.00 sec)

**Union Clause:**

mysql> select stud\_reg\_no,stud\_name,dob,course\_id,subject\_id,grade,result,status from stud\_master left join results on stud\_master.stud\_id=results.stud\_id where result=1

-> union

-> select stud\_reg\_no,stud\_name,dob,course\_id,subject\_id,grade,result,status from stud\_master right join results on stud\_master.stud\_id=results.stud\_id where result=0;

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

| stud\_reg\_no | stud\_name | dob | course\_id | subject\_id | grade | result | status |

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

| 811 | aaa | 1992-09-23 | 401 | 511 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 403 | 512 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 403 | 514 | C | 1 | Pass |

| 811 | aaa | 1992-09-23 | 401 | 513 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 402 | 512 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 402 | 514 | E | 0 | Fail |

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

6 rows in set (0.00 sec)

**Union All:**

mysql> select stud\_reg\_no,stud\_name,dob,course\_id,subject\_id,grade,result,status from stud\_master left join results on stud\_master.stud\_id=results.stud\_id

-> union all

-> select stud\_reg\_no,stud\_name,dob,course\_id,subject\_id,grade,result,status from stud\_master right join results on stud\_master.stud\_id=results.stud\_id;

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

| stud\_reg\_no | stud\_name | dob | course\_id | subject\_id | grade | result | status |

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

| 811 | aaa | 1992-09-23 | 401 | 511 | A | 1 | Pass |

| 811 | aaa | 1992-09-23 | 401 | 513 | E | 0 | Fail |

| 812 | bbb | 1990-07-10 | 403 | 512 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 403 | 514 | C | 1 | Pass |

| 813 | ccc | 1995-01-02 | 402 | 512 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 402 | 514 | E | 0 | Fail |

| 811 | aaa | 1992-09-23 | 401 | 511 | A | 1 | Pass |

| 811 | aaa | 1992-09-23 | 401 | 513 | E | 0 | Fail |

| 812 | bbb | 1990-07-10 | 403 | 512 | A | 1 | Pass |

| 812 | bbb | 1990-07-10 | 403 | 514 | C | 1 | Pass |

| 813 | ccc | 1995-01-02 | 402 | 512 | E | 0 | Fail |

| 813 | ccc | 1995-01-02 | 402 | 514 | E | 0 | Fail |

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

12 rows in set (0.00 sec)

**Alias:**

**Table alias:**

mysql> select s.stud\_id,s.stud\_reg\_no,s.stud\_name,s.dob,m.contact\_no,m.email\_id from stud\_master as s, stud\_meta as m where s.stud\_id=m.stud\_id;

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

| stud\_id | stud\_reg\_no | stud\_name | dob | contact\_no | email\_id |

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

| 101 | 811 | aaa | 1992-09-23 | 8697695321 | yki@gmail.com |

| 102 | 812 | bbb | 1990-07-10 | 9597695883 | nsb@gmail.com |

| 103 | 813 | ccc | 1995-01-02 | 8267692365 | abs@gmail.com |

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

3 rows in set (0.00 sec)

**Column alias:**

mysql> select stud\_id as s\_id, stud\_name as name from stud\_master;

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

| s\_id | name |

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

| 101 | aaa |

| 102 | bbb |

| 103 | ccc |

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

3 rows in set (0.00 sec)

**Count Functions:**

mysql> select count(result\_id) from results;

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

| count(result\_id) |

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

| 8 |

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

1 row in set (0.00 sec)

mysql> select count(result\_id) from results where result=1;

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

| count(result\_id) |

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

| 5 |

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

1 row in set (0.00 sec)

**Max command:**

mysql> select max(result\_id) from results;

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

| max(result\_id) |

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

| 604 |

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

1 row in set (0.00 sec)

**Set Command:**

mysql> update results set status='Pass' where result\_id='604';\_

Query OK, 2 rows affected (0.11 sec)

Rows matched: 2 Changed: 2 Warnings: 0

mysql> select \* from results;

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

| result\_id | stud\_id | course\_id | subject\_id | grade | result | status |

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

| 601 | 101 | 401 | 511 | A | 1 | Pass |

| 601 | 101 | 401 | 513 | E | 0 | Fail |

| 602 | 102 | 403 | 512 | A | 1 | Pass |

| 602 | 102 | 403 | 514 | C | 1 | Pass |

| 603 | 103 | 402 | 512 | E | 0 | Fail |

| 603 | 103 | 402 | 514 | E | 0 | Fail |

| 604 | 104 | 404 | 515 | A | 1 | Pass |

| 604 | 104 | 404 | 516 | B | 1 | Pass |

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

8 rows in set (0.00 sec)

**IN Command:**

mysql> select \* from results where status in ('Pass');

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

| result\_id | stud\_id | course\_id | subject\_id | grade | result | status |

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

| 601 | 101 | 401 | 511 | A | 1 | Pass |

| 602 | 102 | 403 | 512 | A | 1 | Pass |

| 602 | 102 | 403 | 514 | C | 1 | Pass |

| 604 | 104 | 404 | 515 | A | 1 | Pass |

| 604 | 104 | 404 | 516 | B | 1 | Pass |

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

5 rows in set (0.00 sec)

**To Calculate Average of a Student Mark:**

mysql> select \* from results;

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

| result\_id | stud\_id | course\_id | subject\_id | mark | grade | result | status |

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

| 601 | 101 | 401 | 511 | 85 | A | 1 | Pass |

| 601 | 101 | 401 | 513 | 40 | E | 0 | Fail |

| 602 | 102 | 403 | 512 | 90 | A | 1 | Pass |

| 602 | 102 | 403 | 514 | 60 | C | 1 | Pass |

| 603 | 103 | 402 | 512 | 40 | E | 0 | Fail |

| 603 | 103 | 402 | 514 | 35 | E | 0 | Fail |

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

6 rows in set (0.00 sec)

mysql> select avg(mark) from results where result\_id=601;

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

| avg(mark) |

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

| 62.5000 |

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

1 row in set (0.00 sec)

mysql> select stud\_reg\_no,result\_id,course\_id,avg(mark) as average from stud\_master join results on stud\_master.stud\_id=results.stud\_id where results.stud\_id=101;

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

| stud\_reg\_no | result\_id | course\_id | average |

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

| 811 | 601 | 401 | 62.5000 |

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

1 row in set (0.00 sec)

**Academic Pass Percentage:**

**mysql> select (count(result)/count(\*)) \* 100 as percentage from results where result='1' group by result;**

**+------------+**

**| percentage |**

**+------------+**

**| 100.0000 |**

**+------------+**

**1 row in set (0.00 sec)**