Assignment

DBT/ 008

Database Technologies

Diploma in Advance Computing

**Aggregate Functions.**

USE ***student\_phone, student\_address, faculty\_phone, faculty\_address, batch\_students, course\_batches, student\_qualifications, faculty\_qualifications, course\_modules, modules, faculty, student, course, student\_cards, and student\_order*** relation to solve the following queries.

|  |
| --- |
| * Count total number of students. |
| mysql> select \* from student;  +----+-----------+----------+------------+--------------------------+  | ID | firstname | lastname | DOB | emailID |  +----+-----------+----------+------------+--------------------------+  | 1 | saleel | bagde | 1984-06-12 | saleel.bagde@gmail.com |  | 2 | omkar | rokde | 1969-10-25 | omkar.rakde@gmail.com |  | 3 | ulka | joshi | 1970-10-25 | ulka.joshi@gmail.com |  | 4 | rahul | patil | 1982-10-31 | rahul.patil@gmail.com |  | 5 | ruhan | bagde | 1984-01-12 | ruhan.bagde@gmail.com |  | 6 | lala | prasad | 1980-12-01 | lala.prasad@gmail.com |  | 7 | sharmin | bagde | 1986-12-14 | sharmin.bagde@gmail.com |  | 8 | vrushali | bagde | 1984-12-29 | vrushali.bagde@gmail.com |  | 9 | vasant | khande | 1992-10-26 | vasant.khande@gmail.com |  | 10 | nitish | patil | 1990-10-26 | nitish.patil@gmail.com |  | 11 | neel | save | 1975-10-30 | neel.save@gmail.com |  | 12 | deep | save | 1986-11-30 | deep.save@gmail.com |  | 13 | nrupali | save | 1981-12-01 | nrupali.save@gmail.com |  | 14 | supriya | karnik | 1983-12-15 | supriya.karnik@gmail.com |  | 15 | bandish | karnik | 1987-12-30 | bandish.karnik@gmail.com |  | 16 | sangita | karnik | 1990-12-01 | sangita.karnik@gmail.com |  | 17 | sangita | menon | 1989-10-26 | sangita.menon@gmail.com |  | 18 | rahul | shah | 1982-06-12 | rahul.shah@gmail.com |  | 19 | bhavin | patel | 1983-11-13 | bhavin.patel@gmail.com |  | 20 | kaushal | patil | 1982-07-30 | kaushal.patil@gmail.com |  | 21 | pankaj | gandhi | 1982-07-30 | pankaj.gandhi@gmail.com |  | 22 | rajan | patel | 1982-07-30 | rajan.patel@gmail.com |  | 23 | bhavin | patel | 1982-07-30 | bhavin.patel@gmail.com |  | 24 | mukesh | bhavsar | 1982-07-30 | mukesh.bhavsar@gmail.com |  | 25 | dilu | khande | 1982-07-30 | dilu.khande@gmail.com |  | 26 | sonam | khan | 1972-05-13 | sonam.khan@gmail.com |  | 27 | rohit | patil | 1976-12-31 | rohit.patil@gmail.com |  | 28 | raj | bubber | 1982-02-28 | raj.bubber@gmail.com |  +----+-----------+----------+------------+--------------------------+  28 rows in set (0.00 sec)  mysql> select count(\*)R1 from student;  +----+  | R1 |  +----+  | 28 |  +----+  1 row in set (0.00 sec)  mysql> select count(distinct ID)student\_count from student;  +---------------+  | student\_count |  +---------------+  | 28 |  +---------------+  1 row in set (0.00 sec) |
|  |
| * Count total number of students who are born in 1986. |
| mysql> select \* from student where year(dob)='1986';  +----+-----------+----------+------------+-------------------------+  | ID | firstname | lastname | DOB | emailID |  +----+-----------+----------+------------+-------------------------+  | 7 | sharmin | bagde | 1986-12-14 | sharmin.bagde@gmail.com |  | 12 | deep | save | 1986-11-30 | deep.save@gmail.com |  +----+-----------+----------+------------+-------------------------+  2 rows in set (0.00 sec)  mysql> select count( \*) as born in 1986 from student where year(dob)='1986';  ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'in 1986 from student where year(dob)='1986'' at line 1  mysql> select count( \*)R1 from student where year(dob)='1986';  +----+  | R1 |  +----+  | 2 |  +----+  1 row in set (0.00 sec) |
|  |
| * Count total number of students whose namefirst starts with the letter ‘B’. |
| mysql> select count(\*) from student where firstname like 'b%';  +----------+  | count(\*) |  +----------+  | 3 |  +----------+  1 row in set (0.00 sec)  mysql> select \* from student where firstname like 'b%';  +----+-----------+----------+------------+--------------------------+  | ID | firstname | lastname | DOB | emailID |  +----+-----------+----------+------------+--------------------------+  | 15 | bandish | karnik | 1987-12-30 | bandish.karnik@gmail.com |  | 19 | bhavin | patel | 1983-11-13 | bhavin.patel@gmail.com |  | 23 | bhavin | patel | 1982-07-30 | bhavin.patel@gmail.com |  +----+-----------+----------+------------+--------------------------+  3 rows in set (0.00 sec) |
|  |
| * Count total number student who were born in ‘July. |
| mysql> select count( \*)R1 from student where month(dob)='7';  +----+  | R1 |  +----+  | 6 |  +----+  1 row in set (0.00 sec)  mysql> select \* from student where month(dob)='7';  +----+-----------+----------+------------+--------------------------+  | ID | firstname | lastname | DOB | emailID |  +----+-----------+----------+------------+--------------------------+  | 20 | kaushal | patil | 1982-07-30 | kaushal.patil@gmail.com |  | 21 | pankaj | gandhi | 1982-07-30 | pankaj.gandhi@gmail.com |  | 22 | rajan | patel | 1982-07-30 | rajan.patel@gmail.com |  | 23 | bhavin | patel | 1982-07-30 | bhavin.patel@gmail.com |  | 24 | mukesh | bhavsar | 1982-07-30 | mukesh.bhavsar@gmail.com |  | 25 | dilu | khande | 1982-07-30 | dilu.khande@gmail.com |  +----+-----------+----------+------------+--------------------------+  6 rows in set (0.00 sec) |
|  |
| * Display studentID and count the student who is having more than two phones. |
| mysql> select studentid, count(\*) from student\_phone group by studentid having count(studentid)>2;  +-----------+----------+  | studentid | count(\*) |  +-----------+----------+  | 6 | 3 |  | 13 | 4 |  +-----------+----------+  2 rows in set (0.00 sec) |
|  |
| * Count unique universities from student\_qualifications table. |
| mysql> select distinct university from student\_qualifications;  +-------------------------+  | university |  +-------------------------+  | Stanford University |  | Harvard University |  | University of Chicago |  | Yale University |  | California University |  | University of Florida |  | Pennsylvania University |  | Columbia University |  | University of Michigan |  | University of Ohio |  | University Maryland |  +-------------------------+  11 rows in set (0.00 sec)  mysql> select count(distinct university) from student\_qualifications;  +----------------------------+  | count(distinct university) |  +----------------------------+  | 11 |  +----------------------------+  1 row in set (0.00 sec) |
|  |
| * Display the university name and the count of those students who have done ‘BE’ |
| mysql> select university, count(name) from student\_qualifications where name='BE' group by university;  +-------------------------+-------------+  | university | count(name) |  +-------------------------+-------------+  | Harvard University | 9 |  | University of Florida | 3 |  | University of Chicago | 1 |  | Columbia University | 2 |  | Yale University | 1 |  | Pennsylvania University | 2 |  | University of Michigan | 1 |  | University of Ohio | 1 |  +-------------------------+-------------+  8 rows in set (0.00 sec) |
|  |
| * Count how many students has done ‘BE’. |
| mysql> select count(name) from student\_qualifications where name='BE';  +-------------+  | count(name) |  +-------------+  | 20 |  +-------------+  1 row in set (0.00 sec)  mysql> select count(\*) from student\_qualifications where name='BE';  +----------+  | count(\*) |  +----------+  | 20 |  +----------+  1 row in set (0.00 sec) |
|  |
| * Count how many students has not done ‘BE’. |
| mysql> select count(\*) from student\_qualifications where name!='BE';  +----------+  | count(\*) |  +----------+  | 65 |  +----------+  1 row in set (0.00 sec) |
|  |
| * Find the maximum marks student got in ‘BE’. |
| mysql> select max(marks) R1 from student\_qualifications where name='be';  +------+  | R1 |  +------+  | 97 |  +------+  1 row in set (0.00 sec) |
|  |
| * Find the minimum marks student got in ‘BE’. |
| mysql> select min(marks) R1 from student\_qualifications where name='be';  +------+  | R1 |  +------+  | 57 |  +------+  1 row in set (0.00 sec) |
|  |
| * Count how many course\_batches have started on ’2016-02-01’. |
| mysql> select \* from course\_batches;  +----+---------+----------+------------+------------+----------+  | ID | name | courseID | starton | endson | capacity |  +----+---------+----------+------------+------------+----------+  | 1 | Batch1 | 1 | 2016-02-01 | 2016-08-31 | 80 |  | 2 | Batch2 | 2 | 2016-02-01 | 2016-08-31 | 30 |  | 3 | Batch3 | 3 | 2016-02-01 | 2016-03-31 | 35 |  | 4 | Batch4 | 4 | 2016-07-01 | 2016-09-30 | 25 |  | 5 | Batch5 | 5 | 2016-07-01 | 2016-09-30 | 25 |  | 6 | Batch6 | 1 | 2015-02-01 | 2015-08-31 | 80 |  | 7 | Batch7 | 2 | 2015-02-01 | 2015-08-31 | 30 |  | 8 | Batch8 | 3 | 2017-04-01 | 2017-05-31 | 30 |  | 9 | Batch9 | 4 | 2018-07-01 | 2018-09-30 | 25 |  | 10 | Batch10 | 5 | 2018-09-01 | 2018-11-30 | 25 |  | 11 | Batch11 | 1 | 2017-08-01 | 2018-02-28 | 80 |  | 12 | Batch12 | 2 | 2017-08-01 | 2018-02-28 | 30 |  | 13 | Batch13 | 3 | 2017-07-01 | 2017-08-31 | 30 |  | 14 | Batch14 | 4 | 2018-05-01 | 2018-07-31 | 25 |  | 15 | Batch15 | 5 | 2018-06-01 | 2018-08-30 | 25 |  | 16 | Batch16 | 1 | 2014-08-01 | 2015-02-28 | 80 |  | 17 | Batch17 | 2 | 2014-08-01 | 2015-02-28 | 30 |  | 18 | Batch18 | 3 | 2018-03-01 | 2018-04-30 | 35 |  | 19 | Batch19 | 4 | 2019-01-01 | 2019-03-30 | 25 |  | 20 | Batch20 | 5 | 2018-12-01 | 2019-02-28 | 25 |  | 21 | Batch21 | 1 | 2015-08-01 | 2016-02-28 | 80 |  | 22 | Batch22 | 2 | 2015-08-01 | 2016-02-28 | 30 |  | 23 | Batch23 | 3 | 2019-03-01 | 2019-04-30 | 40 |  | 24 | Batch24 | 4 | 2019-01-01 | 2019-03-30 | 30 |  | 25 | Batch25 | 6 | 2019-01-01 | 2019-03-30 | 30 |  +----+---------+----------+------------+------------+----------+  25 rows in set (0.00 sec)  mysql> select count(\*)from course\_batches where starton='2016-02-01';  +----------+  | count(\*) |  +----------+  | 3 |  +----------+  1 row in set (0.00 sec) |
|  |
| * Count the number of students who have more than 60% in ‘BE’. |
| mysql> select count(\*) from student\_qualifications where marks>=60 and name='be';  +----------+  | count(\*) |  +----------+  | 19 |  +----------+  1 row in set (0.00 sec) |
|  |
| * Count the number of students who have more than 60% in ‘BE’ and done from ‘Harvard university’. |
| mysql> select count(\*) from student\_qualifications where marks>=60 and name='be'and university= 'harvard university';  +----------+  | count(\*) |  +----------+  | 9 |  +----------+  1 row in set (0.00 sec) |
|  |
| * Count number of courses. |
| mysql> select count(name) from course;  +-------------+  | count(name) |  +-------------+  | 7 |  +-------------+  1 row in set (0.00 sec) |
|  |
| * Count how many distinct universities from student\_qualifications table. |
| mysql> select count(distinct university) from student\_qualifications;  +----------------------------+  | count(distinct university) |  +----------------------------+  | 11 |  +----------------------------+  1 row in set (0.00 sec) |
|  |
| * Find the maximum marks any student has got in “BE”. |
| mysql> select max(marks) from student\_qualifications where name='be';  +------------+  | max(marks) |  +------------+  | 97 |  +------------+  1 row in set (0.00 sec) |
|  |