Stored func:

<https://www.geeksforgeeks.org/mysql-creating-stored-function/>

 The IN, OUT and INOUT keywords do not apply to stored functions, triggers and events. Triggers and events do not have parameters at all. For the stored functions, all parameters are like IN parameters.

DBT Assignment

1. Create a database named college

Create a table name student in college database with following structure

roll,name,class,marks,age with respective datatypes.

Insert at least 7 entries in it.

mysql> create database collegenew;

Query OK, 1 row affected (0.01 sec)

mysql> show databases;

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

| Database |

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

| College |

| Company |

| Workerdb |

| clg |

| college |

| college1 |

| college2 |

| college3 |

| college5 |

| college\_info |

| collegenew |

| information\_schema |

| mysql |

| performance\_schema |

| sys |

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

15 rows in set (0.01 sec)

mysql> use collegenew;

Database changed

mysql> create table student

-> (roll int,

-> name varchar(40),

-> class varchar(40),

-> marks double,

-> age int);

Query OK, 0 rows affected (0.02 sec)

mysql> insert into student values(100,"Manish Sharma","DAC",69.70,19);

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(101,"Fatima Sheikh","DITIIS",89.70,90);

Query OK, 1 row affected (0.00 sec)

mysql> insert into student values(102,"Shankar Dhahte","Science",63.78,21);

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(103,"Roshni Kumar","DAC",64.67,22);

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(104,"Diya Mirza","DBDA",70.89,23);

Query OK, 1 row affected (0.00 sec)

mysql> insert into student values(105,"Achanchl Thakre","DBDA",72.50,26);

Query OK, 1 row affected (0.00 sec)

mysql> insert into student values(106,"Lekha Rahate","DBDA",79.50,22);

Query OK, 1 row affected (0.01 sec)

mysql> select \* from student;

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

| roll | name | class | marks | age |

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

| 100 | Manish Sharma | DAC | 69.7 | 19 |

| 101 | Fatima Sheikh | DITIIS | 89.7 | 90 |

| 101 | Fatima Sheikh | DITIIS | 89.7 | 26 |

| 102 | Shankar Dhahte | Science | 63.78 | 21 |

| 103 | Roshni Kumar | DAC | 64.67 | 22 |

| 104 | Diya Mirza | DBDA | 70.89 | 23 |

| 105 | Achanchl Thakre | DBDA | 72.5 | 26 |

| 106 | Lekha Rahate | DBDA | 79.5 | 22 |

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

8 rows in set (0.00 sec)

2.Create a new column which states that where the students got first class of

not?

mysql> select \* , if(marks>70.00,'First Class','Second Class') as result from student;

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

| roll | name | class | marks | age | result |

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

| 100 | Manish Sharma | DAC | 69.7 | 19 | Second Class |

| 101 | Fatima Sheikh | DITIIS | 89.7 | 90 | First Class |

| 101 | Fatima Sheikh | DITIIS | 89.7 | 26 | First Class |

| 102 | Shankar Dhahte | Science | 63.78 | 21 | Second Class |

| 103 | Roshni Kumar | DAC | 64.67 | 22 | Second Class |

| 104 | Diya Mirza | DBDA | 70.89 | 23 | First Class |

| 105 | Achanchl Thakre | DBDA | 72.5 | 26 | First Class |

| 106 | Lekha Rahate | DBDA | 79.5 | 22 | First Class |

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

8 rows in set (0.00 sec)

mysql> select \* from student;

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

| roll | name | class | marks | age |

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

| 100 | Manish Sharma | DAC | 69.7 | 19 |

| 101 | Fatima Sheikh | DITIIS | 89.7 | 26 |

| 102 | Shankar Dhahte | Science | 63.78 | 21 |

| 103 | Roshni Kumar | DAC | 64.67 | 22 |

| 104 | Diya Mirza | DBDA | 70.89 | 23 |

| 105 | Achanchl Thakre | DBDA | 72.5 | 26 |

| 106 | Lekha Rahate | DBDA | 79.5 | 22 |

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

7 rows in set (0.00 sec)

mysql> select \*,if(marks>70.00,'First Class','Second Class') as result from student;

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

| roll | name | class | marks | age | result |

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

| 100 | Manish Sharma | DAC | 69.7 | 19 | Second Class |

| 101 | Fatima Sheikh | DITIIS | 89.7 | 26 | First Class |

| 102 | Shankar Dhahte | Science | 63.78 | 21 | Second Class |

| 103 | Roshni Kumar | DAC | 64.67 | 22 | Second Class |

| 104 | Diya Mirza | DBDA | 70.89 | 23 | First Class |

| 105 | Achanchl Thakre | DBDA | 72.5 | 26 | First Class |

| 106 | Lekha Rahate | DBDA | 79.5 | 22 | First Class |

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

7 rows in set (0.00 sec)

2) Create a new column which states that grade of the students:

1) > 75: A+ grade

2) > 60: A grade3) > 55: B+ grade

4) > 50: B grade

5) > 40: C grade

6) < 40: D grade

mysql> SELECT \* ,

-> CASE

-> WHEN marks > 75.00 THEN 'A+'

-> WHEN marks > 60.00 THEN 'A'

-> WHEN marks > 55.00 THEN 'B+'

-> WHEN marks > 50.00 THEN 'B'

-> WHEN marks > 40.00 THEN 'C'

-> ELSE 'D'

-> END as grade

-> FROM student;

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

| roll | name | class | marks | age | grade |

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

| 100 | Manish Sharma | DAC | 69.7 | 19 | A |

| 101 | Fatima Sheikh | DITIIS | 89.7 | 26 | A+ |

| 102 | Shankar Dhahte | Science | 63.78 | 21 | A |

| 103 | Roshni Kumar | DAC | 64.67 | 22 | A |

| 104 | Diya Mirza | DBDA | 70.89 | 23 | A |

| 105 | Achanchl Thakre | DBDA | 72.5 | 26 | A |

| 106 | Lekha Rahate | DBDA | 79.5 | 22 | A+ |

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

7 rows in set (0.00 sec)

3)Create a procedure to find addition of first 10 natural numbers.

mysql> DELIMITER &&

mysql> CREATE PROCEDURE natural\_number1()

-> BEGIN

-> DECLARE num int;

-> DECLARE sum int;

-> SET num = 0;

-> SET sum=0;

-> myloop: LOOP // The myloop label marks the beginning of a loop

->

-> SET sum=sum+num;

-> SET num = num + 1;

-> IF num >= 11 THEN

-> LEAVE myloop;

-> END IF;

-> END LOOP myloop;

-> SELECT sum;

-> END &&

Query OK, 0 rows affected (0.00 sec)

mysql> DELIMITER ;

mysql> call natural\_number1;

+------+

| sum |

+------+

| 55 |

+------+

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

4)Create a procedure to enter a parameter and check where that is even

number or odd number or neither of them.

mysql> CREATE PROCEDURE OddEven\_Number(in num int,out result varchar(40))

-> BEGIN

-> IF (num%2=0) THEN

-> set result='Even Number!';

-> ELSE

-> set result='Odd Number!';

-> END IF;

-> select result;

-> END &&

Query OK, 0 rows affected (0.00 sec)

mysql> call OddEven\_Number(23,@result);

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

| result |

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

| Odd Number! |

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

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

5) Write a procedure to pass marks a parameter and find the grade of the

student according to marks:

1) > 75: A+ grade2) > 60: A grade

3) > 55: B+ grade

4) > 50: B grade

5) > 40: C grade

6) < 40: D grade

mysql> create procedure resultGrade(in marks int,out studGrade varchar(5))

-> begin

-> if (marks>=75) then

-> set studGrade='A+';

-> elseif (marks>60 and marks<75) then

-> set studGrade='A';

-> elseif (marks>55 and marks<60) then

-> set studGrade='B+';

-> elseif (marks>50 and marks<55) then

-> set studGrade='B';

-> elseif (marks>40 and marks<50) then

-> set studGrade='C';

-> else

-> set studGrade='D';

-> end if;

-> select studGrade;

-> end &&

Query OK, 0 rows affected (0.00 sec)

mysql> call resultGrade(56, @studGrade);

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

| studGrade |

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

| B+ |

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

1 row in set (0.00 sec)