```
Last login: Thu Mar 21 10:05:56 on ttys000
                                                              macbook@Kshitijs-MacBook-Air ~ % mysql -u root
m
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 45
Server version: 8.3.0 Homebrew

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use impact
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> delimiter //
mysql> create function ms()
    -> returns decimal
    -> DETERMINISTIC
    -> begin
    -> declare v_m decimal;
    -> select max(sal) into v_m from emp;
    -> return v_m;
    -> end //
Query OK, 0 rows affected (0.03 sec)

mysql> delimiter ;
mysql> select ms() as maximumsal;
+------------+
| maximumsal |
+------------+
|       5000 |
+------------+
1 row in set (0.01 sec)

mysql> select ms()
    -> ;
+------+
| ms() |
+------+
| 5000 |
+------+
1 row in set (0.00 sec)

mysql> create function ms1(in empkanaam varchar(20))
    -> returns varchar(20)
    -> DETERMINISTIC
    -> begin
    -> declare v_m varchar(20);
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 em
pkanaam varchar(20))
returns varchar(20)
DETERMINISTIC
begin
declare v_m va' at line 1
mysql> delimiter //
mysql> create function ms1(in empkanaam varchar(20))
    -> //
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 em
pkanaam varchar(20))' at line 1
mysql>
mysql>
mysql> create function welen(en varchar(10))
    -> return varchar(30)
    -> deteministic
    -> begin
    -> declare v_en varchar(30);
    -> set v_en = concat('welcome',en)
    -> return v_en;
    -> end//
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 'retur
n varchar(30)
deteministic
begin
declare v_en varchar(30);
set v_en = conca' at line 2
mysql> create function welen(en varchar(10))
    -> returns varchar(30)
    -> deteministic
    -> begin
    -> declare v_en varchar(30);
    -> set v_en = concat('welcome',en)
    -> return v_en;
    -> end//
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 'begin
declare v_en varchar(30);
set v_en = concat('welcome',en)
return v_en;
end' at line 4
mysql> create function welen(en varchar(10))
    -> returns varchar(30)
    -> deteministicbegin
    -> //
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 '' at
line 3
mysql> create function welen(en varchar(10))
    -> returns varchar(30)
    -> deteministic
    -> begin
    -> declare v_en varchar(30);
    -> set v_en = concat('welcome',en);
    -> return v_en;
    -> end//
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 'begin
declare v_en varchar(30);
set v_en = concat('welcome',en);
return v_en;
en' at line 4
mysql> create function welen(en varchar(10))
    -> returns varchar(30)
    -> DETERMINISTIC
    -> begin
    -> declare v_en varchar(30);
```

```
        -> set v_en = concat('welcome',en);
        -> return v_en;
        -> end//
Query OK, 0 rows affected (0.05 sec)

mysql> delimiter ;
mysql> select welen('raju');
+---------------+
| welen('raju') |
+---------------+
| welcomeraju   |
+---------------+
1 row in set (0.01 sec)

mysql> select welen(' Kshitij');
+------------------+
| welen(' Kshitij') |
+------------------+
| welcome Kshitij   |
+------------------+
1 row in set (0.00 sec)

mysql> select welen(ename from emp;
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 'from
emp' at line 1
mysql> select welen(ename) from emp;
+---------------+
| welen(ename)  |
+---------------+
| welcomeSMITH  |
| welcomeALLEN  |
| welcomeWARD   |
| welcomeJONES  |
| welcomeMARTIN |
| welcomeBLAKE  |
| welcomeCLARK  |
| welcomeSCOTT  |
| welcomeKING   |
| welcomeTURNER |
| welcomeADAMS  |
| welcomeJAMES  |
| welcomeFORD   |
| welcomeMILLER |
| welcomegopal  |
| welcomeQueen  |
| welcomeDasi   |
| welcomeArjit  |
| welcomeRAJESH |
+---------------+
19 rows in set (0.01 sec)

mysql> delimiter //
mysql> create function sum_of_3(a int,b int,c int)
    -> returns int
    -> DETERMINISTIC
    -> begin
    -> declare ans int;
    -> d = a+b+c;
    -> //
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 '= a+b
+c' at line 6
mysql> create function sum_of_3(a int,b int,c int)
    -> returns int
    -> DETERMINISTIC
    -> begin
    -> return (a+b+c);
    -> end //
Query OK, 0 rows affected (0.00 sec)

mysql> select sum_of3(10,10,10);
    -> //
ERROR 1305 (42000): FUNCTION impact.sum_of3 does not exist
mysql> select sum_of_3(10,10,10);
    -> //
+--------------------+
| sum_of_3(10,10,10) |
+--------------------+
|                 30 |
+--------------------+
1 row in set (0.01 sec)

mysql> create table marks(m1 int,m2 int,m3 int);
    -> //
Query OK, 0 rows affected (0.06 sec)

mysql> insert into marks values(70,80,92),(12,43,34);
    -> //
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> select sum_of_3(m1,m2,m3) from marks;
    -> //
+--------------------+
| sum_of_3(m1,m2,m3) |
+--------------------+
|                242 |
|                 89 |
+--------------------+
2 rows in set (0.00 sec)

mysql> show function status where db='impact';
    -> //
+--------+----------+----------+----------+---------------+---------------------+---------------------+---------------+---------+----------------------+--------------------+--------------------+
| Db     | Name     | Type     | Language | Definer       | Modified            | Created             | Security_type | Comment | character_set_client | collation_connection | Database Collation |
+--------+----------+----------+----------+---------------+---------------------+---------------------+---------------+---------+----------------------+--------------------+--------------------+
| impact | ms       | FUNCTION | SQL      | root@localhost | 2024-03-21 10:07:25 | 2024-03-21 10:07:25 | DEFINER       |         | utf8mb4              | utf8mb4_0900_ai_ci | utf8mb4_0900_ai_ci |
| impact | sum_of_3 | FUNCTION | SQL      | root@localhost | 2024-03-21 10:36:07 | 2024-03-21 10:36:07 | DEFINER       |         | utf8mb4              | utf8mb4_0900_ai_ci | utf8mb4_0900_ai_ci |
| impact | welen    | FUNCTION | SQL      | root@localhost | 2024-03-21 10:27:18 | 2024-03-21 10:27:18 | DEFINER       |         | utf8mb4              | utf8mb4_0900_ai_ci | utf8mb4_0900_ai_ci |
+--------+----------+----------+----------+---------------+---------------------+---------------------+---------------+---------+----------------------+--------------------+--------------------+
3 rows in set (0.09 sec)
```

```
mysql> select routine_schema,
    -> routine_name,
    -> routine_type
    -> from information_schema.routines
    -> where routine_schema = 'impact' and routine_type = 'FUNCTION';//
+----------------+--------------+--------------+
| ROUTINE_SCHEMA | ROUTINE_NAME | ROUTINE_TYPE |
+----------------+--------------+--------------+
| impact         | ms           | FUNCTION     |
| impact         | sum_of_3     | FUNCTION     |
| impact         | welen        | FUNCTION     |
+----------------+--------------+--------------+
3 rows in set (0.00 sec)

mysql> show create function ms;//
+----------+------------------------------------------------------------------------------------------------------------------------------------------------------+--------------------
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------+------------------
----+---------------------+--------------------+
| Function | sql_mode                                                                                                                                             | Create Function
                                                                                                                                                                | character_set_cli
ent | collation_connection | Database Collation |
+----------+------------------------------------------------------------------------------------------------------------------------------------------------------+--------------------
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------+------------------
----+---------------------+--------------------+
| ms       | ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION | CREATE DEFINER=`root`@`loca
lhost` FUNCTION `ms`() RETURNS decimal(10,0)
    DETERMINISTIC
begin
declare v_m decimal;
select max(sal) into v_m from emp;
return v_m;
end | utf8mb4              | utf8mb4_0900_ai_ci   | utf8mb4_0900_ai_ci |
+----------+------------------------------------------------------------------------------------------------------------------------------------------------------+--------------------
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------+------------------
----+---------------------+--------------------+
1 row in set (0.00 sec)

mysql> select sysdate(),currdate();
    -> //
ERROR 1305 (42000): FUNCTION impact.currdate does not exist
mysql> select sysdate(),curr_date();
    -> //
ERROR 1305 (42000): FUNCTION impact.curr_date does not exist
mysql> delimiter ;
mysql> select sysdate(),current_date();
+---------------------+----------------+
| sysdate()           | current_date() |
+---------------------+----------------+
| 2024-03-21 11:10:06 | 2024-03-21     |
+---------------------+----------------+
1 row in set (0.01 sec)

mysql> select now(),sysdate(),current_date();
+---------------------+---------------------+----------------+
| now()               | sysdate()           | current_date() |
+---------------------+---------------------+----------------+
| 2024-03-21 11:10:35 | 2024-03-21 11:10:35 | 2024-03-21     |
+---------------------+---------------------+----------------+
1 row in set (0.00 sec)

mysql> select date(now());
+-------------+
| date(now()) |
+-------------+
| 2024-03-21  |
+-------------+
1 row in set (0.00 sec)

mysql> select curdate();
+------------+
| curdate()  |
+------------+
| 2024-03-21 |
+------------+
1 row in set (0.01 sec)

mysql> select date_format(date(now()), '%d_%m_%y') Styled_date;
+-------------+
| Styled_date |
+-------------+
| 21_03_24    |
+-------------+
1 row in set (0.00 sec)

mysql> select date_format(date(now()), '%d-%m-%y') Styled_date;
+-------------+
| Styled_date |
+-------------+
| 21-03-24    |
+-------------+
1 row in set (0.00 sec)

mysql> select hiredate from emp ;
+------------+
| hiredate   |
+------------+
| 1980-12-17 |
| 1981-02-20 |
| 1981-02-22 |
| 1981-04-02 |
| 1981-09-28 |
| 1981-05-01 |
| 1981-06-09 |
| 1982-12-09 |
| 1981-11-17 |
| 1981-09-08 |
| 1983-01-12 |
| 1981-12-03 |
| 1981-12-03 |
| 1982-01-23 |
| NULL       |
| NULL       |
| NULL       |
| NULL       |
| NULL       |
+------------+
```

```
19 rows in set (0.01 sec)

mysql> select hiredate,date_format(hiredate,'%d-%m-%y') form emp;
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 'emp'
at line 1
mysql> select hiredate,date_format(hiredate,'%d-%m-%y') fromm emp;
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 'emp'
at line 1
mysql> select hiredate,date_format(hiredate,'%d-%m-%y') from emp;
+------------+--------------------------------+
| hiredate   | date_format(hiredate,'%d-%m-%y') |
+------------+--------------------------------+
| 1980-12-17 | 17-12-80                       |
| 1981-02-20 | 20-02-81                       |
| 1981-02-22 | 22-02-81                       |
| 1981-04-02 | 02-04-81                       |
| 1981-09-28 | 28-09-81                       |
| 1981-05-01 | 01-05-81                       |
| 1981-06-09 | 09-06-81                       |
| 1982-12-09 | 09-12-82                       |
| 1981-11-17 | 17-11-81                       |
| 1981-09-08 | 08-09-81                       |
| 1983-01-12 | 12-01-83                       |
| 1981-12-03 | 03-12-81                       |
| 1981-12-03 | 03-12-81                       |
| 1982-01-23 | 23-01-82                       |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
+------------+--------------------------------+
19 rows in set (0.00 sec)

mysql> select hiredate,date_format(hiredate,'%d-%m-%Y') from emp;
+------------+--------------------------------+
| hiredate   | date_format(hiredate,'%d-%m-%Y') |
+------------+--------------------------------+
| 1980-12-17 | 17-12-1980                     |
| 1981-02-20 | 20-02-1981                     |
| 1981-02-22 | 22-02-1981                     |
| 1981-04-02 | 02-04-1981                     |
| 1981-09-28 | 28-09-1981                     |
| 1981-05-01 | 01-05-1981                     |
| 1981-06-09 | 09-06-1981                     |
| 1982-12-09 | 09-12-1982                     |
| 1981-11-17 | 17-11-1981                     |
| 1981-09-08 | 08-09-1981                     |
| 1983-01-12 | 12-01-1983                     |
| 1981-12-03 | 03-12-1981                     |
| 1981-12-03 | 03-12-1981                     |
| 1982-01-23 | 23-01-1982                     |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
+------------+--------------------------------+
19 rows in set (0.00 sec)

mysql> select hiredate,date_format(hiredate,'%D-%m-%Y') from emp;
+------------+--------------------------------+
| hiredate   | date_format(hiredate,'%D-%m-%Y') |
+------------+--------------------------------+
| 1980-12-17 | 17th-12-1980                   |
| 1981-02-20 | 20th-02-1981                   |
| 1981-02-22 | 22nd-02-1981                   |
| 1981-04-02 | 2nd-04-1981                    |
| 1981-09-28 | 28th-09-1981                   |
| 1981-05-01 | 1st-05-1981                    |
| 1981-06-09 | 9th-06-1981                    |
| 1982-12-09 | 9th-12-1982                    |
| 1981-11-17 | 17th-11-1981                   |
| 1981-09-08 | 8th-09-1981                    |
| 1983-01-12 | 12th-01-1983                   |
| 1981-12-03 | 3rd-12-1981                    |
| 1981-12-03 | 3rd-12-1981                    |
| 1982-01-23 | 23rd-01-1982                   |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
+------------+--------------------------------+
19 rows in set (0.01 sec)

mysql> select hiredate,date_format(hiredate,'%D-%M-%Y') from emp;
+------------+--------------------------------+
| hiredate   | date_format(hiredate,'%D-%M-%Y') |
+------------+--------------------------------+
| 1980-12-17 | 17th-December-1980             |
| 1981-02-20 | 20th-February-1981             |
| 1981-02-22 | 22nd-February-1981             |
| 1981-04-02 | 2nd-April-1981                 |
| 1981-09-28 | 28th-September-1981            |
| 1981-05-01 | 1st-May-1981                   |
| 1981-06-09 | 9th-June-1981                  |
| 1982-12-09 | 9th-December-1982              |
| 1981-11-17 | 17th-November-1981             |
| 1981-09-08 | 8th-September-1981             |
| 1983-01-12 | 12th-January-1983              |
| 1981-12-03 | 3rd-December-1981              |
| 1981-12-03 | 3rd-December-1981              |
| 1982-01-23 | 23rd-January-1982              |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
| NULL       | NULL                           |
+------------+--------------------------------+
19 rows in set (0.00 sec)

mysql> select datediff('2019-08-04',2019-08-01') diff;
    '> ;
    '> '
    -> ;
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 '' at
```

```
line 3
mysql> select datediff('2019-08-04','2019-08-01') diff;
+------+
| diff |
+------+
|    3 |
+------+
1 row in set (0.01 sec)

mysql> select * from emp;
+-------+--------+-----------+------+------------+---------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal     | comm    | deptno |
+-------+--------+-----------+------+------------+---------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800.00 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1981-02-20 | 1600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1981-02-22 | 1250.00 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1981-04-02 | 2975.00 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1981-09-28 | 1250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1981-05-01 | 2850.00 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1981-06-09 | 2450.00 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1982-12-09 | 3000.00 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1981-11-17 | 5000.00 |    NULL |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1981-09-08 | 1500.00 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1983-01-12 | 1100.00 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 1981-12-03 |  950.00 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1981-12-03 | 3000.00 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 1982-01-23 | 1300.00 |    NULL |     10 |
|  1001 | gopal  | NULL      | NULL | NULL       | 4000.00 |    NULL |   NULL |
|  1002 | Queen  | Rest      | NULL | NULL       |         |    NULL |   NULL |
|  1003 | Dasi   | Kaam      | NULL | NULL       |    NULL |    NULL |   NULL |
|  1003 | Arjit  | sing      | NULL | NULL       |    NULL |    NULL |   NULL |
|  7143 | RAJESH | NULL      | NULL | NULL       | 5000.00 |    NULL |     30 |
+-------+--------+-----------+------+------------+---------+---------+--------+
19 rows in set (0.01 sec)

mysql> select empno,ename,job,hiredate,datediff(currdate(),hiredate) from emp;
ERROR 1305 (42000): FUNCTION impact.currdate does not exist
mysql> select empno,ename,job,hiredate,datediff(current_date(),hiredate) from emp;
+-------+--------+-----------+------------+-----------------------------------+
| empno | ename  | job       | hiredate   | datediff(current_date(),hiredate) |
+-------+--------+-----------+------------+-----------------------------------+
|  7369 | SMITH  | CLERK     | 1980-12-17 |                             15800 |
|  7499 | ALLEN  | SALESMAN  | 1981-02-20 |                             15735 |
|  7521 | WARD   | SALESMAN  | 1981-02-22 |                             15733 |
|  7566 | JONES  | MANAGER   | 1981-04-02 |                             15694 |
|  7654 | MARTIN | SALESMAN  | 1981-09-28 |                             15515 |
|  7698 | BLAKE  | MANAGER   | 1981-05-01 |                             15665 |
|  7782 | CLARK  | MANAGER   | 1981-06-09 |                             15626 |
|  7788 | SCOTT  | ANALYST   | 1982-12-09 |                             15078 |
|  7839 | KING   | PRESIDENT | 1981-11-17 |                             15465 |
|  7844 | TURNER | SALESMAN  | 1981-09-08 |                             15535 |
|  7876 | ADAMS  | CLERK     | 1983-01-12 |                             15044 |
|  7900 | JAMES  | CLERK     | 1981-12-03 |                             15449 |
|  7902 | FORD   | ANALYST   | 1981-12-03 |                             15449 |
|  7934 | MILLER | CLERK     | 1982-01-23 |                             15398 |
|  1001 | gopal  | NULL      | NULL       |                              NULL |
|  1002 | Queen  | Rest      | NULL       |                              NULL |
|  1003 | Dasi   | Kaam      | NULL       |                              NULL |
|  1003 | Arjit  | sing      | NULL       |                              NULL |
|  7143 | RAJESH | NULL      | NULL       |                              NULL |
+-------+--------+-----------+------------+-----------------------------------+
19 rows in set (0.00 sec)

mysql> select empno,ename,job,hiredate,datediff(current_date(),hiredate) as Experience from emp;
+-------+--------+-----------+------------+------------+
| empno | ename  | job       | hiredate   | Experience |
+-------+--------+-----------+------------+------------+
|  7369 | SMITH  | CLERK     | 1980-12-17 |      15800 |
|  7499 | ALLEN  | SALESMAN  | 1981-02-20 |      15735 |
|  7521 | WARD   | SALESMAN  | 1981-02-22 |      15733 |
|  7566 | JONES  | MANAGER   | 1981-04-02 |      15694 |
|  7654 | MARTIN | SALESMAN  | 1981-09-28 |      15515 |
|  7698 | BLAKE  | MANAGER   | 1981-05-01 |      15665 |
|  7782 | CLARK  | MANAGER   | 1981-06-09 |      15626 |
|  7788 | SCOTT  | ANALYST   | 1982-12-09 |      15078 |
|  7839 | KING   | PRESIDENT | 1981-11-17 |      15465 |
|  7844 | TURNER | SALESMAN  | 1981-09-08 |      15535 |
|  7876 | ADAMS  | CLERK     | 1983-01-12 |      15044 |
|  7900 | JAMES  | CLERK     | 1981-12-03 |      15449 |
|  7902 | FORD   | ANALYST   | 1981-12-03 |      15449 |
|  7934 | MILLER | CLERK     | 1982-01-23 |      15398 |
|  1001 | gopal  | NULL      | NULL       |       NULL |
|  1002 | Queen  | Rest      | NULL       |       NULL |
|  1003 | Dasi   | Kaam      | NULL       |       NULL |
|  1003 | Arjit  | sing      | NULL       |       NULL |
|  7143 | RAJESH | NULL      | NULL       |       NULL |
+-------+--------+-----------+------------+------------+
19 rows in set (0.00 sec)

mysql> select '2019-08-04' actual,
    -> date_add('2019-08-04',interval 1 day) 'Added 1 day',
    -> date_add('2019-08-04',interval 1 week) 'Added 1 week',
    -> date_add('2019-08-04',interval 1 month) 'Added 1 month',
    -> date_add('2019-08-04',interval 1 year) 'Added 1 year';
+------------+-------------+--------------+---------------+--------------+
| actual     | Added 1 day | Added 1 week | Added 1 month | Added 1 year |
+------------+-------------+--------------+---------------+--------------+
| 2019-08-04 | 2019-08-05  | 2019-08-11   | 2019-09-04    | 2020-08-04   |
+------------+-------------+--------------+---------------+--------------+
1 row in set (0.00 sec)

mysql> select extract(day from '2020-08-04');
+-------------------------------+
| extract(day from '2020-08-04') |
+-------------------------------+
|                             4 |
+-------------------------------+
1 row in set (0.00 sec)

mysql> select extract(month from '2020-08-04');
+---------------------------------+
| extract(month from '2020-08-04') |
+---------------------------------+
|                               8 |
+---------------------------------+
1 row in set (0.00 sec)
```

```
mysql> select extract(year from '2020-08-04');
+--------------------------------+
| extract(year from '2020-08-04') |
+--------------------------------+
|                           2020 |
+--------------------------------+
1 row in set (0.00 sec)

mysql> select extract(year_month from '2020-08-04');
+--------------------------------------+
| extract(year_month from '2020-08-04') |
+--------------------------------------+
|                               202008 |
+--------------------------------------+
1 row in set (0.00 sec)

mysql> select str_to_date('2020-08-04');
ERROR 1582 (42000): Incorrect parameter count in the call to native function 'str_to_date'
mysql> select str_to_date();
ERROR 1582 (42000): Incorrect parameter count in the call to native function 'str_to_date'
mysql> SELECT STR_TO_DATE("August 10 2017", "%M %d %Y");
+------------------------------------------+
| STR_TO_DATE("August 10 2017", "%M %d %Y") |
+------------------------------------------+
| 2017-08-10                               |
+------------------------------------------+
1 row in set (0.04 sec)

mysql>
mysql>
Display all 901 possibilities? (y or n)
mysql>                                                              #TRIGGER
    -> ;
Query OK, 0 rows affected (0.03 sec)

mysql> show tables;
+------------------+
| Tables_in_impact |
+------------------+
| course           |
| course_5         |
| customer_1       |
| dept             |
| dept_u1          |
| dept_u2          |
| emp              |
| emp14            |
| emp15            |
| emp_select       |
| emp_v2           |
| emp_withdata     |
| emp_withoutdata  |
| marks            |
| product_1        |
| salgrade         |
| stud_info        |
| student          |
| student_5        |
| student_course   |
| test_v12         |
| users            |
+------------------+
22 rows in set (0.29 sec)

mysql> select * from emp14;
+-------+-------+---------+
| empno | ename | sal     |
+-------+-------+---------+
|   101 | smith | 4000.00 |
+-------+-------+---------+
1 row in set (0.01 sec)

mysql> delimiter//
    -> ;
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 'delim
iter//' at line 1
mysql> delimiter //
mysql> create trigger trg_emp14
    -> before insert on emp14
    -> for each row
    -> begin
    -> set new.ename=upper(new.ename);
    -> end //
Query OK, 0 rows affected (0.07 sec)

mysql> delimiter ;
mysql> select * from emp14;
+-------+-------+---------+
| empno | ename | sal     |
+-------+-------+---------+
|   101 | smith | 4000.00 |
+-------+-------+---------+
1 row in set (0.01 sec)

mysql> insert into emp14 values(102,'raju',3000);
Query OK, 1 row affected (0.00 sec)

mysql> select *from emp14l
    -> ;
ERROR 1146 (42S02): Table 'impact.emp14l' doesn't exist
mysql> select *from emp14;
+-------+-------+---------+
| empno | ename | sal     |
+-------+-------+---------+
|   101 | smith | 4000.00 |
|   102 | RAJU  | 3000.00 |
+-------+-------+---------+
2 rows in set (0.00 sec)

mysql> insert into emp14 values(103,'ARchit',30000),(104,'aDu',500);
Query OK, 2 rows affected (0.00 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> select *from emp14;
+-------+-------+---------+
| empno | ename | sal     |
+-------+-------+---------+
```

```
|   101 | smith   |  4000.00 |
|   102 | RAJU    |  3000.00 |
|   103 | ARCHIT  | 30000.00 |
|   104 | ADU     |   500.00 |
+-------+---------+----------+
4 rows in set (0.00 sec)

mysql> create table product_2(pid int primary key auto_increment,pname varchar(20),price int);
Query OK, 0 rows affected (0.12 sec)

mysql> alter table product auto_increment=7001;
ERROR 1146 (42S02): Table 'impact.product' doesn't exist
mysql> insert into product_2(pname,price) values('tv',5000);
Query OK, 1 row affected (0.02 sec)

mysql> create table product_2_backup(pid int,createdby varchar(20),createddate date);
Query OK, 0 rows affected (0.02 sec)

mysql> delimiter //
mysql> create trigger trg_product_2
    ->  after insert on product_2
    -> for each row
    -> begin
    -> declare vUser varchar(20);
    -> select user() into vUser;
    -> insert into product_2_backup values(last_insert_id(),vUser,current_date());
    -> end //
Query OK, 0 rows affected (0.02 sec)

mysql> delimiter ;
mysql> insert into product_2 (pname,price) values('lp',10000);
Query OK, 1 row affected (0.01 sec)

mysql> select * from product_2;
+-----+-------+-------+
| pid | pname | price |
+-----+-------+-------+
|   1 | tv    |  5000 |
|   2 | lp    | 10000 |
+-----+-------+-------+
2 rows in set (0.00 sec)

mysql> select * from product_2_backup;
+------+---------------+-------------+
| pid  | createdby     | createddate |
+------+---------------+-------------+
|    1 | root@localhost | 2024-03-21 |
+------+---------------+-------------+
1 row in set (0.00 sec)

mysql> delimiter ;                                            mysql> create table emp15(empno varchar(10), ename varchar(10), sal float);
ERROR 1050 (42S01): Table 'emp15' already exists
mysql> create table emp16(empno varchar(10), ename varchar(10), sal float);
Query OK, 0 rows affected (0.03 sec)

mysql> create trigger trg_emp15
    -> before insert on emp15
    -> //
    -> ;
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 '//' a
t line 3
mysql> delimiter //
mysql> create trigger tgr_emp16
    -> before insert on emp16
    -> for each row
    -> begin
    -> set new.empno=concat('PU_',new.empno);
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> insert into emp15 values(5010,'smith',3000);
    -> //
Query OK, 1 row affected (0.02 sec)

mysql> select * from emp15//
+-------+-------+---------+
| empno | ename | sal     |
+-------+-------+---------+
|     1 | smith | 3000.00 |
|  5010 | smith | 3000.00 |
+-------+-------+---------+
2 rows in set (0.00 sec)

mysql> insert into emp16 values(5010,'smith',3000)//
Query OK, 1 row affected (0.01 sec)

mysql> select * from emp16//
+---------+-------+------+
| empno   | ename | sal  |
+---------+-------+------+
| PU_5010 | smith | 3000 |
+---------+-------+------+
1 row in set (0.00 sec)

mysql> create table studentdetails(sid int(4),sname varchar(10),m1 int(3),m2 int(3),m3 int(3),total int(5));
    -> //
Query OK, 0 rows affected, 5 warnings (0.09 sec)

mysql> delimiter ;
mysql> delimiter //
mysql> create trigger trg_sd
    -> before insert on studentdetails
    -> for each row
    -> begin
    -> set new.total=(m1+m2+m3);
    -> end //
Query OK, 0 rows affected (0.02 sec)

mysql> delimiter ;
mysql> drop trg_sd;
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 'trg_s
d' at line 1
mysql> drop trigger trg_sd;
Query OK, 0 rows affected (0.01 sec)

mysql> create trigger trg_sd
    -> before insert on
```

```
    -> studentdetails
    -> for each row
    -> begin
    -> set new.total = new.m1+new.m2+new.m3;
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 '' at
line 6
mysql> delimiter //
mysql> create trigger trg_sd
    -> before insert on studentdetails
    -> for each row
    -> beginset new.total = new.m1+new.m2+new.m3;
    -> end //
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 'new.t
otal = new.m1+new.m2+new.m3;
end' at line 4
mysql> create trigger trg_sdcreate trigger trg_sd
    -> create trigger trg_sd//
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 'trigg
er trg_sd
create trigger trg_sd' at line 1
mysql> create trigger trg_sd
    -> before insert on studentdetails
    -> for each row
    -> begin
    -> set new.total = new.m1+new.m2+new.m3;
    -> end //
Query OK, 0 rows affected (0.02 sec)

mysql> delimiter ;
mysql> insert into studentdetails (sid,sname,m1,m2,m3) values(1,'rahul',69,60,70);
Query OK, 1 row affected (0.01 sec)

mysql> select * from studentdetails;
+------+-------+------+------+------+-------+
| sid  | sname | m1   | m2   | m3   | total |
+------+-------+------+------+------+-------+
|    1 | rahul |   69 |   60 |   70 |   199 |
+------+-------+------+------+------+-------+
1 row in set (0.01 sec)

mysql> show tables;
+------------------+
| Tables_in_impact |
+------------------+
| course           |
| course_5         |
| customer_1       |
| dept             |
| dept_u1          |
| dept_u2          |
| emp              |
| emp14            |
| emp15            |
| emp16            |
| emp_select       |
| emp_v2           |
| emp_withdata     |
| emp_withoutdata  |
| marks            |
| product_1        |
| product_2        |
| product_2_backup |
| salgrade         |
| stud_info        |
| student          |
| student_5        |
| student_course   |
| studentdetails   |
| test_v12         |
| users            |
+------------------+
26 rows in set (0.08 sec)

mysql> create table emp_base(empno int,ename varchar(20),sal float);
Query OK, 0 rows affected (0.11 sec)

mysql> create table emp_base_backup(n_ename varchar(20),o_ename varchar(20),n_sal float,o_sal float,created_by varchar(30),created_on date);
Query OK, 0 rows affected (0.04 sec)

mysql> mysql> alter table emp_base_backup add  empno int;
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 'table
r table emp_base_backup add  empno int' at line 1
mysql> alter table emp_base_backup add  empno int;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> insert into emp_base values(1001,'smith',3000);
Query OK, 1 row affected (0.01 sec)

mysql> insert into emp_base values(1002,'raju',4000);
Query OK, 1 row affected (0.00 sec)

mysql> delimiter //
mysql> create trigger trg_emp_base
    -> before update on emp_base
    -> for each row
    -> begin
    -> declare vUser varchar(20);
    -> select user() into vUser;
    -> insert into emp_base_backup values(new.ename,old.ename,new.sal,old.sal,vUser,current_date()),old.empno);
    -> end //
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 'old.e
mpno);
end' at line 7
mysql> create trigger trg_emp_base
    -> create trigger trg_emp_base
    ->
    -> for each row
    -> begin
    -> declare vUser varchar(20);
    -> select user() into vUser;
    -> insert into emp_base_backup values(new.ename,old.ename,new.sal,old.sal,vUser,current_date(),old.empno);
    -> end //
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 'creat
e trigger trg_emp_base

for each row
```

```
begin
declare vUser varchar(20);
selec' at line 2
mysql> create trigger trg_emp_base
    -> before update on emp_base
    -> for each row
    -> begin
    -> declare vUser varchar(20);
    -> select user() into vUser;
    -> insert into emp_base_backup values(new.ename,old.ename,new.sal,old.sal,vUser,current_date(),old.empno);
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> select * from emp_base;
    -> //
+-------+-------+------+
| empno | ename | sal  |
+-------+-------+------+
|  1001 | smith | 3000 |
|  1002 | raju  | 4000 |
+-------+-------+------+
2 rows in set (0.00 sec)

mysql> delimiter ;
mysql> select * from emp_base_backup;
Empty set (0.00 sec)

mysql> update emp_base set ename = 'martin',sal=5000 where empno=1002;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from emp_base;
+-------+-------+------+
| empno | ename | sal  |
+-------+-------+------+
|  1001 | smith | 3000 |
|  1002 | martin| 5000 |
+-------+-------+------+
2 rows in set (0.00 sec)

mysql> select * from emp_base_backup;
+---------+---------+-------+-------+----------------+------------+-------+
| n_ename | o_ename | n_sal | o_sal | created_by     | created_on | empno |
+---------+---------+-------+-------+----------------+------------+-------+
| martin  | raju    |  5000 |  4000 | root@localhost | 2024-03-21 |  1002 |
+---------+---------+-------+-------+----------------+------------+-------+
1 row in set (0.00 sec)

mysql> create table emp_base_delete_backup select * from emp_base;
Query OK, 2 rows affected (0.10 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> select * from emp_base_backup;
+---------+---------+-------+-------+----------------+------------+-------+
| n_ename | o_ename | n_sal | o_sal | created_by     | created_on | empno |
+---------+---------+-------+-------+----------------+------------+-------+
| martin  | raju    |  5000 |  4000 | root@localhost | 2024-03-21 |  1002 |
+---------+---------+-------+-------+----------------+------------+-------+
1 row in set (0.01 sec)

mysql> select * from emp_base_delete_backup;
+-------+-------+------+
| empno | ename | sal  |
+-------+-------+------+
|  1001 | smith | 3000 |
|  1002 | martin| 5000 |
+-------+-------+------+
2 rows in set (0.00 sec)

mysql> trancute emp_base_delete_backup;
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 'tranc
ute emp_base_delete_backup' at line 1
mysql> truncate table emp_base_delete_backup;
Query OK, 0 rows affected (0.03 sec)

mysql> select * from emp_base_delete_backup;l
Empty set (0.00 sec)

    -> ;
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 'l' at
 line 1
mysql> alter table emp_base_delete_backup add created_by varchar(20) and deleted_on date;
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 'and d
eleted_on date' at line 1
mysql> alter table emp_base_delete_backup add created_by varchar(20) , deleted_on date;
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 'delet
ed_on date' at line 1
mysql> alter table emp_base_delete_backup add created_by varchar(20);
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table emp_base_delete_backup add deleted_on date;
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select * from emp_base_delete_backup;
Empty set (0.00 sec)

mysql> desc emp_base_delete_backup;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| empno      | int         | YES  |     | NULL    |       |
| ename      | varchar(20) | YES  |     | NULL    |       |
| sal        | float       | YES  |     | NULL    |       |
| created_by | varchar(20) | YES  |     | NULL    |       |
| deleted_on | date        | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
5 rows in set (0.03 sec)

mysql> create trigger trg_emp_base_delelte
    -> before delete on emp_base
    -> for each row
    -> begin
    -> declare vUser varchar(20);
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 '' at
line 5
```

```
mysql> delimiter //
mysql> create trigger trg_emp_base_delete
    -> before delete on emp_base
    -> for each row
    -> begin
    -> declare vUser varchar(20);
    -> select user() into vUser;
    -> insert into emp_base_delete_backup values(old.empno,old.ename,old.sal,vUser,current_date());
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> select * from emp_base;
+-------+--------+------+
| empno | ename  | sal  |
+-------+--------+------+
|  1001 | smith  | 3000 |
|  1002 | martin | 5000 |
+-------+--------+------+
2 rows in set (0.01 sec)

mysql> delete from emp_base where empno=1002;
Query OK, 1 row affected (0.00 sec)

mysql> select * from emp_base;
+-------+-------+------+
| empno | ename | sal  |
+-------+-------+------+
|  1001 | smith | 3000 |
+-------+-------+------+
1 row in set (0.00 sec)

mysql> select * from emp_base_delete_backup;
+-------+--------+------+---------------+------------+
| empno | ename  | sal  | created_by    | deleted_on |
+-------+--------+------+---------------+------------+
|  1002 | martin | 5000 | root@localhost | 2024-03-21 |
+-------+--------+------+---------------+------------+
1 row in set (0.00 sec)

mysql> show trigger from impact where `table`='emp_base';
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 'trigg
er from impact where `table`='emp_base'' at line 1
mysql> show triggers from impact where `table`='emp_base';
+--------------------+--------+----------+----------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------+--------+----------------------+----------------------------------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------+----------------+---------------------+----------------------+--------------------+
| Trigger            | Event  | Table    | Statement
                                  | Timing | Created              | sql_mode
                                | Definer        | character_set_client | collation_connection | Database Collation |
+--------------------+--------+----------+----------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------+--------+----------------------+----------------------------------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------+----------------+---------------------+----------------------+--------------------+
| trg_emp_base       | UPDATE | emp_base | begin
declare vUser varchar(20);
select user() into vUser;
insert into emp_base_backup values(new.ename,old.ename,new.sal,old.sal,vUser,current_date(),old.empno);
end | BEFORE | 2024-03-21 15:28:31.49 | ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION |
root@localhost | utf8mb4              | utf8mb4_0900_ai_ci    | utf8mb4_0900_ai_ci |
| trg_emp_base_delete | DELETE | emp_base | begin
declare vUser varchar(20);
select user() into vUser;
insert into emp_base_delete_backup values(old.empno,old.ename,old.sal,vUser,current_date());
end          | BEFORE | 2024-03-21 15:43:28.45 | ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBS
TITUTION | root@localhost | utf8mb4              | utf8mb4_0900_ai_ci    | utf8mb4_0900_ai_ci |
+--------------------+--------+----------+----------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------+--------+----------------------+----------------------------------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------+----------------+---------------------+----------------------+--------------------+
2 rows in set (0.08 sec)

mysql>
```