

```
mysql> use dbmsla5;
```

```
mysql> create table Borrower(
```

```
    -> rollno INT,s
```

```
    -> name VARCHAR(20),
```

```
    -> DOI Date,
```

```
    -> nameOfBook VARCHAR(50),
```

```
    -> Status VARCHAR(10));
```

```
mysql> desc Borrower;
```

```
mysql> create table Fine(
```

```
    -> rollno INT,
```

```
    -> DOR Date,
```

```
    -> amt INT);
```

```
mysql> desc Fine;
```

```
mysql> insert into Borrower values(1,'Durvesh','2020-09-01','Algorithms','Issued');
```

Query OK, 1 row affected (0.21 sec)

```
mysql> insert into Borrower values(2,'Aditi','2020-08-25','Walk Through the Stars','Issued');
```

Query OK, 1 row affected (0.08 sec)

```
mysql> insert into Borrower values(3,'Eesha','2020-08-27','Digital Marketing','Issued');
```

Query OK, 1 row affected (0.08 sec)

```
mysql> insert into Borrower values(4,'Atharva','2020-08-01','Python Ultimatum','Issued');
```

Query OK, 1 row affected (0.09 sec)

```
mysql> insert into Borrower values(5,'Vishwa','2020-07-30','Android Development','Issued');
```

Query OK, 1 row affected (0.07 sec)

```
mysql> select * from Borrower;
```

```
mysql> select * from Fine;
```

```
mysql> delimiter //
```

```
mysql> create procedure CalculateFine(IN rollno Integer, IN bname VARCHAR(50))
```

```
-> begin
```

```
-> declare fine integer;
```

```
-> declare noOfDays integer;
```

```
-> declare issueDate Date;
```

```
-> select DOI into issueDate from Borrower where Borrower.rollno = rollno and  
Borrower.nameOfBook = bname;
```

```
-> select datediff(sysdate(), issueDate) into noOfDays;
```

```
-> if noOfDays>=15 and noOfDays<=30 then
```

```
-> set fine = (5*noOfDays);
```

```
-> end if;
```

```
-> if noOfDays>30 then
```

```
-> set fine = (50*noOfDays);
```

```
-> end if;
```

```
-> insert into Fine values(rollno, sysdate(), fine);
```

```
-> update Borrower set Status='Received' where Borrower.rollno = rollno;
```

```
-> end;
```

```
-> //
```

```
mysql> show create procedure CalculateFine;
```

```
-> //
```

```
mysql> select * from Borrower;
```

```
-> //
```

```
mysql> delimiter ;
```

```
mysql> select * from Fine;
```

```
mysql> call CalculateFine(4,'Mechatronics');
```

```
mysql> select * from Borrower;
```

```
mysql> select * from Fine;
```

```
MySQL 8.0 Command Line Client

mysql> use dbmsla5;
Database changed
mysql> create table Borrower(rollno INT, name VARCHAR(20), DOI Date, nameOfBook VARCHAR(50), Status VARCHAR(10));
Query OK, 0 rows affected (1.52 sec)

mysql> DESC BORROWER;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| rollno | int | YES | | NULL | |
| name | varchar(20) | YES | | NULL | |
| DOI | date | YES | | NULL | |
| nameOfBook | varchar(50) | YES | | NULL | |
| Status | varchar(10) | YES | | NULL | |
+-----+
5 rows in set (0.09 sec)

mysql> insert into borrower values (1,'Durvish','2020-09-01','Algorithms','Issued');
Query OK, 1 row affected (0.11 sec)

mysql> insert into borrower values (2,'Aditi','2020-08-25','Walk through the stars','Issued');
Query OK, 1 row affected (0.15 sec)

mysql> insert into borrower values (3,'Eesha','2020-08-27','Digital Marketing','Issued');
Query OK, 1 row affected (0.09 sec)

mysql> insert into borrower values (4,'Atharva','2020-08-01','Python Ultimatum','Issued');
Query OK, 1 row affected (0.16 sec)

mysql> insert into borrower values (5,'Vishwa','2020-07-30','Android Development','Issued');
Query OK, 1 row affected (0.09 sec)

mysql> select * from borrower;
+-----+
| rollno | name | DOI | nameOfBook | Status |
+-----+
| 1 | Durvish | 2020-09-01 | Algorithms | Issued |
| 2 | Aditi | 2020-08-25 | Walk through the stars | Issued |
| 3 | Eesha | 2020-08-27 | Digital Marketing | Issued |
| 4 | Atharva | 2020-08-01 | Python Ultimatum | Issued |
| 5 | Vishwa | 2020-07-30 | Android Development | Issued |
+-----+
5 rows in set (0.00 sec)

mysql> select * from fine;
ERROR 1146 (42S02): Table 'dbmsla5.fine' doesn't exist
mysql> create table fine;
ERROR 1113 (42000): A table must have at least 1 column
mysql> create table fine(
```

```
MySQL 8.0 Command Line Client

ERROR 1146 (42S02): Table 'dbmsla5.fine' doesn't exist
mysql> create table fine;
ERROR 1113 (42000): A table must have at least 1 column
mysql> create table fine(
    -> rollno INT,
    -> DOI Date,
    -> amt INT);
Query OK, 0 rows affected (2.06 sec)

mysql> desc fine;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| rollno | int | YES | | NULL | |
| DOI | date | YES | | NULL | |
| amt | int | YES | | NULL | |
+-----+
3 rows in set (0.06 sec)

mysql> select * from fine;
Empty set (0.05 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 'delimiter //' at line 1
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 'delimiter //' at line 1
mysql> delimiter //
mysql> create procedure CalculateFine(IN rollno Integer, IN bname varchar(50))
    -> begin
    -> declare fine integer;
    -> declare noOfDays integer;
    -> declare issueDate Date;
    -> select DOI into issueDate from Borrower where Borrower.rollno = rollno and Borrower.nameOfBook = bname;
    -> select datediff(sysdate(), issueDate) into noOfDays;
    -> if noOfDays>15 and noOfDays<=30 then
    -> set fine = (5*noOfDays);
    -> end if;
    -> if noOfDays>30 then
    -> set fine = (50*noOfDays);
    -> end if;
    -> insert into Fine values(rollno, sysdate(), fine);
    -> update Borrower set Status='Received' where Borrower.rollno = rollno;
    -> end;
    -> //
Query OK, 0 rows affected (0.14 sec)

mysql> show create procedure CalculateFine;
```

```
MySQL 8.0 Command Line Client
-> end;
-> //
Query OK, 0 rows affected (0.14 sec)

mysql> show create procedure CalculateFine;
-> //

+-----+-----+-----+
| Procedure | sql_mode | Create Procedure |
+-----+-----+-----+
|          |          |                  |
+-----+-----+-----+
|          |          |                  |
+-----+-----+-----+
|          |          |                  |
+-----+-----+-----+
| CalculateFine | STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION | CREATE DEFINER='root'@'localhost' PROCEDURE 'CalculateFine'(IN rollno Integer, IN bname varchar(50))
begin
declare fine Integer;
declare noOfDays Integer;
declare issueDate Date;
select DOI into issueDate from Borrower where Borrower.rollno = rollno and Borrower.nameOfBook = bname;
select datediff(sysdate(), issueDate) into noOfDays;
if noOfDays>15 and noOfDays<=30 then
set fine = (5*noOfDays);
end if;
if noOfDays>30 then
set fine = (50*noOfDays);
end if;
insert into Fine values(rollno, sysdate(), fine);
update Borrower set Status='Received' where Borrower.rollno = rollno;
end | cp850 | cp850_general_ci | utf8mb4_0900_ai_ci |

+-----+-----+-----+
1 row in set (0.00 sec)

mysql> select * from borrower;
-> //

+-----+-----+-----+-----+-----+
| rollno | name | DOI | nameOfBook | Status |
+-----+-----+-----+-----+-----+
| 1 | Durvesh | 2020-09-01 | Algorithms | Issued |
| 2 | Aditi | 2020-08-25 | Walk through the stars | Issued |
| 3 | Eesha | 2020-08-27 | Digital Marketing | Issued |
| 4 | Atharva | 2020-08-01 | Python Ultimatum | Issued |
| 5 | Vishwa | 2020-07-30 | Android Development | Issued |
+-----+-----+-----+-----+-----+

1 row in set (0.00 sec)
```

```
MySQL 8.0 Command Line Client
1 row in set (0.00 sec)

mysql> select * from borrower;
-> //

+-----+-----+-----+-----+-----+
| rollno | name | DOI | nameOfBook | Status |
+-----+-----+-----+-----+-----+
| 1 | Durvesh | 2020-09-01 | Algorithms | Issued |
| 2 | Aditi | 2020-08-25 | Walk through the stars | Issued |
| 3 | Eesha | 2020-08-27 | Digital Marketing | Issued |
| 4 | Atharva | 2020-08-01 | Python Ultimatum | Issued |
| 5 | Vishwa | 2020-07-30 | Android Development | Issued |
+-----+-----+-----+-----+-----+

5 rows in set (0.04 sec)

mysql> delimiter ;
mysql> select * from fine;
Empty set (0.04 sec)

mysql> call CalculateFine(4,'Python Ultimatum');
Query OK, 1 row affected (0.27 sec)

mysql> select * from borrower;

+-----+-----+-----+-----+-----+
| rollno | name | DOI | nameOfBook | Status |
+-----+-----+-----+-----+-----+
| 1 | Durvesh | 2020-09-01 | Algorithms | Issued |
| 2 | Aditi | 2020-08-25 | Walk through the stars | Issued |
| 3 | Eesha | 2020-08-27 | Digital Marketing | Issued |
| 4 | Atharva | 2020-08-01 | Python Ultimatum | Received |
| 5 | Vishwa | 2020-07-30 | Android Development | Issued |
+-----+-----+-----+-----+-----+

5 rows in set (0.00 sec)

mysql> select * from fine;

+-----+-----+-----+
| rollno | DOR | amt |
+-----+-----+-----+
| 4 | 2020-09-09 | 1950 |
+-----+-----+-----+

1 row in set (0.00 sec)

mysql>
```