

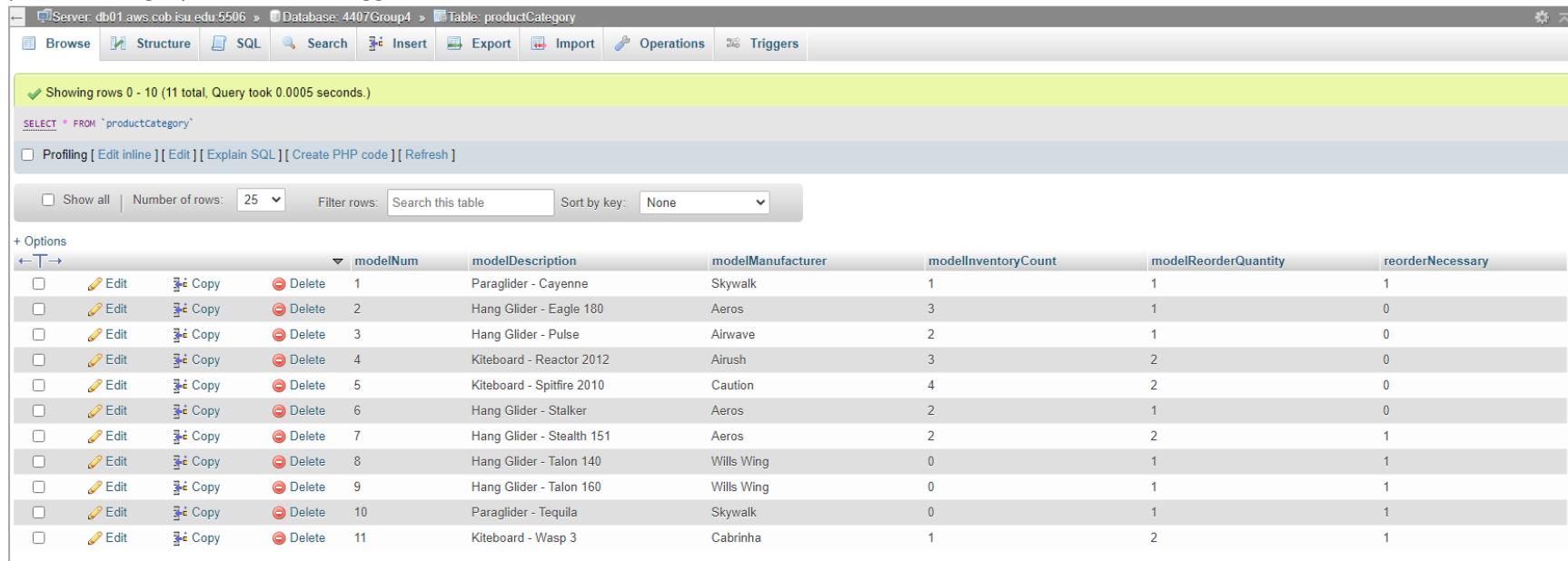
Trigger #1

```

CREATE TRIGGER `trigger1` BEFORE UPDATE ON `productCategory`
FOR EACH ROW BEGIN
IF NEW.modelInventoryCount <= OLD.modelReorderQuantity THEN
SET NEW.reorderNecessary = 1;
ELSE SET NEW.reorderNecessary = 0;
IF NEW.modelReorderQuantity > OLD.modelInventoryCount THEN
SET NEW.reorderNecessary = 1;
ELSE SET NEW.reorderNecessary = 0;
END IF;
END IF;
END

```

productCategory table before trigger event:



Showing rows 0 - 10 (11 total, Query took 0.0005 seconds.)

SELECT * FROM `productCategory`

☐ Profiling [Edit Inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

				modelNum	modelDescription	modelManufacturer	modelInventoryCount	modelReorderQuantity	reorderNecessary
<input type="checkbox"/>	Edit	Copy	Delete	1	Paraglider - Cayenne	Skywalk	1	1	1
<input type="checkbox"/>	Edit	Copy	Delete	2	Hang Glider - Eagle 180	Aeros	3	1	0
<input type="checkbox"/>	Edit	Copy	Delete	3	Hang Glider - Pulse	Airwave	2	1	0
<input type="checkbox"/>	Edit	Copy	Delete	4	Kiteboard - Reactor 2012	Airush	3	2	0
<input type="checkbox"/>	Edit	Copy	Delete	5	Kiteboard - Spitfire 2010	Caution	4	2	0
<input type="checkbox"/>	Edit	Copy	Delete	6	Hang Glider - Stalker	Aeros	2	1	0
<input type="checkbox"/>	Edit	Copy	Delete	7	Hang Glider - Stealth 151	Aeros	2	2	1
<input type="checkbox"/>	Edit	Copy	Delete	8	Hang Glider - Talon 140	Wills Wing	0	1	1
<input type="checkbox"/>	Edit	Copy	Delete	9	Hang Glider - Talon 160	Wills Wing	0	1	1
<input type="checkbox"/>	Edit	Copy	Delete	10	Paraglider - Tequila	Skywalk	0	1	1
<input type="checkbox"/>	Edit	Copy	Delete	11	Kiteboard - Wasp 3	Cabrinha	1	2	1

Update:

Run SQL query/queries on table 4407Group4.productCategory: ?

```
1 UPDATE `productCategory` SET `modelInventoryCount` = '1' WHERE `productCategory`.`modelNum` = 4;
```

After:

Server: db01.aws.cob.isu.edu:5506 » Database: 4407Group4 » Table: productCategory

Browse Structure SQL Search Insert Export Import Operations Triggers

Showing rows 0 - 10 (11 total. Query took 0.0006 seconds.)

SELECT * FROM `productCategory`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

				modelNum	modelDescription	modelManufacturer	modelInventoryCount	modelReorderQuantity	reorderNecessary
<input type="checkbox"/>	Edit	Copy	Delete	1	Paraglider - Cayenne	Skywalk	1	1	1
<input type="checkbox"/>	Edit	Copy	Delete	2	Hang Glider - Eagle 180	Aeros	3	1	0
<input type="checkbox"/>	Edit	Copy	Delete	3	Hang Glider - Pulse	Airwave	2	1	0
<input type="checkbox"/>	Edit	Copy	Delete	4	Kiteboard - Reactor 2012	Airush	1	1	1
<input type="checkbox"/>	Edit	Copy	Delete	5	Kiteboard - Spitfire 2010	Caution	4	2	0
<input type="checkbox"/>	Edit	Copy	Delete	6	Hang Glider - Stalker	Aeros	2	1	0
<input type="checkbox"/>	Edit	Copy	Delete	7	Hang Glider - Stealth 151	Aeros	2	2	1
<input type="checkbox"/>	Edit	Copy	Delete	8	Hang Glider - Talon 140	Wills Wing	0	1	1
<input type="checkbox"/>	Edit	Copy	Delete	9	Hang Glider - Talon 160	Wills Wing	0	1	1
<input type="checkbox"/>	Edit	Copy	Delete	10	Paraglider - Tequila	Skywalk	0	1	1
<input type="checkbox"/>	Edit	Copy	Delete	11	Kiteboard - Wasp 3	Cabrinha	1	2	1

Trigger #2 INSERT

```

CREATE TRIGGER `InsertTheCard` BEFORE INSERT ON `transaction`
FOR EACH ROW BEGIN
IF NEW.salesAgreementPaymentType = 'Credit Card' THEN
SET @a= ValidateCreditCard(NEW.salesAgreementCardNumberUsed);
IF @a= 'Not Valid!' THEN
SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Error: The credit Card number is not valid';

```

-- <https://dev.mysql.com/doc/refman/8.0/en/signal.html>

END IF;

END IF;

END

Transaction table before triggers:

Server: db01.aws.cob.isu.edu:5506 » Database: 4407Group4 » Table: transaction

Showing rows 0 - 11 (12 total, Query took 0.0005 seconds.)

SELECT * FROM `transaction`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options			salesAgreementNum	salesAgreementDate	salesAgreementTime	salesAgreementPaymentType	salesAgreementCardNumberUsed	customerNum	salespersonNum
<input type="checkbox"/>	Edit Copy Delete		10000000	2018-06-16	08:34:00	Credit Card	4120666734254132	1	2
<input type="checkbox"/>	Edit Copy Delete		10000001	2018-07-05	16:45:00	Credit Card	5140123408221452	2	3
<input type="checkbox"/>	Edit Copy Delete		10000002	2018-07-14	14:02:00	Credit Card	8564858986567844	3	1
<input type="checkbox"/>	Edit Copy Delete		10000003	2019-06-30	12:13:00	Credit Card	4555554444333221	4	2
<input type="checkbox"/>	Edit Copy Delete		10000004	2019-06-06	13:31:00	Credit Card	3666677778888999	5	2
<input type="checkbox"/>	Edit Copy Delete		10000005	2019-07-02	12:37:00	Cash	NULL	6	4
<input type="checkbox"/>	Edit Copy Delete		10000006	2020-05-30	11:23:00	Cash	NULL	7	3
<input type="checkbox"/>	Edit Copy Delete		10000007	2020-06-21	10:00:00	Cash	NULL	8	3
<input type="checkbox"/>	Edit Copy Delete		10000008	2020-06-21	11:21:00	Credit Card	5268080043376894	1	3
<input type="checkbox"/>	Edit Copy Delete		10000009	2020-06-22	15:18:00	Credit Card	5268080043376894	1	3
<input type="checkbox"/>	Edit Copy Delete		10000010	2020-07-24	15:32:00	Credit Card	4555554444333221	4	3
<input type="checkbox"/>	Edit Copy Delete		10000011	2020-06-01	14:42:00	Credit Card	3666677778888999	5	2

INSERT (with error)

Run SQL query/queries on table 4407Group4.transaction: ⓘ

1 INSERT INTO `transaction` (salesAgreementDate, salesAgreementTime, salesAgreementPaymentType, salesAgreementCardNumberUsed, customerNum, salespersonNum) VALUES ('2021-04-14', DEFAULT, 'Credit Card', DEFAULT, 2, 1);|

SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query

☐ Bind parameters ⓘ

Delimiter ; ☒ Show this query here again ☐ Retain query box ☐ Rollback when finished ☒ Enable foreign key checks

Error

SQL query: [Copy](#)

INSERT INTO `transaction` (salesAgreementDate, salesAgreementTime, salesAgreementPaymentType, salesAgreementCardNumberUsed, customerNum, salespersonNum) VALUES ('2021-04-14', DEFAULT, 'Credit Card', DEFAULT, 2, 1)

MySQL said: ⓘ

#1644 - Error: The credit Card number is not valid

Successful INSERT:

```
INSERT INTO `transaction` (salesAgreementDate, salesAgreementTime, salesAgreementPaymentType, salesAgreementCardNumberUsed, customerNum, salespersonNum) VALUES ('2021-04-14', DEFAULT, 'Credit Card', 5268080043376894, 2, 1);
```

SELECT * FROM `transaction`

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: | Sort by key: None

+ Options

				salesAgreementNum	salesAgreementDate	salesAgreementTime	salesAgreementPaymentType	salesAgreementCardNumberUsed	customerNum	salespersonNum
<input type="checkbox"/>				10000000	2018-06-16	08:34:00	Credit Card	4120666734254132	1	2
<input type="checkbox"/>				10000001	2018-07-05	16:45:00	Credit Card	5140123408221452	2	3
<input type="checkbox"/>				10000002	2018-07-14	14:02:00	Credit Card	8564858986567844	3	1
<input type="checkbox"/>				10000003	2019-06-30	12:13:00	Credit Card	4555554444333221	4	2
<input type="checkbox"/>				10000004	2019-06-06	13:31:00	Credit Card	3666677778888999	5	2
<input type="checkbox"/>				10000005	2019-07-02	12:37:00	Cash	NULL	6	4
<input type="checkbox"/>				10000006	2020-05-30	11:23:00	Cash	NULL	7	3
<input type="checkbox"/>				10000007	2020-06-21	10:00:00	Cash	NULL	8	3
<input type="checkbox"/>				10000008	2020-06-21	11:21:00	Credit Card	5268080043376894	1	3
<input type="checkbox"/>				10000009	2020-06-22	15:18:00	Credit Card	5268080043376894	1	3
<input type="checkbox"/>				10000010	2020-07-24	15:32:00	Credit Card	4555554444333221	4	3
<input type="checkbox"/>				10000011	2020-06-07	12:23:00	Cash	3666677778888999	5	2
<input type="checkbox"/>				10000015	2021-04-14	11:00:57	Credit Card	5268080043376894	2	1

Trigger #2 UPDATE

```
CREATE TRIGGER `updateTheCard` BEFORE UPDATE ON `transaction`
```

```
FOR EACH ROW BEGIN
```

```
IF NEW.salesAgreementPaymentType = 'Credit Card' THEN
```

```
SET @b= ValidateCreditCard(NEW.salesAgreementCardNumberUsed);
```

```
IF @b= 'Not Valid!' THEN
```

```
SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Error: The credit Card number is not valid';
```

```
-- https://dev.mysql.com/doc/refman/8.0/en/signal.html
```

```
END IF;
```

```
END IF;
```

```
END
```

UPDATE (with error)

Run SQL query/queries on table 4407Group4.transaction: ?

```
1 UPDATE `transaction` SET `salesAgreementPaymentType` = 'Credit Card', `salesAgreementCardNumberUsed` = '5268080843376893' WHERE `salesAgreementNum` = 1000005;
```

SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query

☐ Bind parameters ?

Delimiter ; ☒ Show this query here again ☐ Retain query box ☐ Rollback when finished ☒ Enable foreign key checks

Hide query box

Error

SQL query: [Copy](#)

```
UPDATE `transaction` SET `salesAgreementPaymentType` = 'Credit Card', `salesAgreementCardNumberUsed` = '5268080843376893' WHERE `salesAgreementNum` = 1000005
```

MySQL said: ?

#1644 - Error: The credit Card number is not valid

UPDATE (successful)

✓ 0 rows affected. (Query took 0.0010 seconds.)

```
UPDATE `transaction` SET `salesAgreementPaymentType` = 'Credit Card', `salesAgreementCardNumberUsed` = '5268080043376894' WHERE `salesAgreementNum` = 10000005
```

[Edit inline] [Edit] [Create PHP code]

✓ Showing rows 0 - 12 (13 total, Query took 0.0007 seconds.)

```
SELECT * FROM `transaction`
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

				salesAgreementNum	salesAgreementDate	salesAgreementTime	salesAgreementPaymentType	salesAgreementCardNumberUsed	customerNum	salespersonNum
<input type="checkbox"/>	Edit	Copy	Delete	10000000	2018-06-16	08:34:00	Credit Card	4120666734254132	1	2
<input type="checkbox"/>	Edit	Copy	Delete	10000001	2018-07-05	16:45:00	Credit Card	5140123408221452	2	3
<input type="checkbox"/>	Edit	Copy	Delete	10000002	2018-07-14	14:02:00	Credit Card	8564858986567844	3	1
<input type="checkbox"/>	Edit	Copy	Delete	10000003	2019-06-30	12:13:00	Credit Card	4555554444333221	4	2
<input type="checkbox"/>	Edit	Copy	Delete	10000004	2019-06-06	13:31:00	Credit Card	3666677778888999	5	2
<input type="checkbox"/>	Edit	Copy	Delete	10000005	2019-07-02	12:37:00	Credit Card	5268080043376894	6	4
<input type="checkbox"/>	Edit	Copy	Delete	10000006	2020-05-30	11:23:00	Cash	NULL	7	3
<input type="checkbox"/>	Edit	Copy	Delete	10000007	2020-06-21	10:00:00	Cash	NULL	8	3
<input type="checkbox"/>	Edit	Copy	Delete	10000008	2020-06-21	11:21:00	Credit Card	5268080043376894	1	3
<input type="checkbox"/>	Edit	Copy	Delete	10000009	2020-06-22	15:18:00	Credit Card	5268080043376894	1	3
<input type="checkbox"/>	Edit	Copy	Delete	10000010	2020-07-24	15:32:00	Credit Card	4555554444333221	4	3
<input type="checkbox"/>	Edit	Copy	Delete	10000011	2020-06-01	14:42:00	Credit Card	3666677778888999	5	2
<input type="checkbox"/>	Edit	Copy	Delete	10000015	2021-04-14	11:00:57	Credit Card	5268080043376894	2	1