

CONSTRAINT TESTING

Constraint Test 1: Testing Primary key of ladder table

Date: November 12, 2019

Description: Confirm primary key constraint on ladder_id column in ladder(product) table.

Expected Results: If we give same id again which is already present, then insert should fail because we are entering duplicate value which is against primary key rule.

Action: INSERT INTO tp_ladder
VALUES(5,'Orchard
Ladder','Orchard',0,1000,12,10,5,102);

Actual Result: SQL Error [23505]: [SQL0803] Duplicate key value specified.

Constraint Test 2: Testing Primary key of order table

Date: November 12, 2019

Description: Confirm primary key constraint on order_id column in order table.

Expected Results: If we give same id again which is already present, then insert should fail because we are entering duplicate value which is against primary key rule.

Action: INSERT INTO tp_order
VALUES(211,'2019-10-23',1000,2,10,2);

Actual Result: SQL Error [23505]: [SQL0803] Duplicate key value specified

Constraint Test 3: Testing foreign key of ladder table

Date: November 12, 2019

Description: Confirm foreign key constraint on warehouse_id column in ladder(product) table.

Expected Results: If we give warehouse_id value which is not in the table which we are created in the warehouse table then it should throw error because we are referring the warehouse_id which is not even present in the warehouse table.

Action: INSERT INTO tp_ladder
VALUES(5,'Orchard
Ladder','Orchard',0,1000,12,10,5,303);

Actual Result: Operation not allowed by referential constraint TP_LADDER_WAREHOUSE_ID_FK in IBM7907.

Constraint Test 4: Testing foreign key of order table

Date: November 12, 2019

Description: Confirm foreign key constraint on ladder_id column in order table.

Expected Results: If we give ladder_id value which is not in the table which we are created in the ladder table then it should throw error because we are referring the ladder_id which is not even present in the ladder table.

Action: INSERT INTO tp_order
VALUES(211,'2019-10-23',1000,2,10,100);

Actual Result: SQL Error [23503]: [SQL0530] Operation not allowed by referential constraint
TP_ORDER_LADDER_ID_FK in IBM7907.

Constraint Test 5: Testing unique key of associate table

Date: November 12, 2019

Description: Confirm unique key constraint on associate_soc_no column in associate table.

Expected Results: If we give associate_soc_no value which is already present in the table then it will throw error as unique key does not allow duplicate values.

Action: INSERT INTO tp_associate
VALUES(404,'Bharadwaj','alice
street',12584,1234569870,'2019-1-12',101);

Actual Result: SQL Error [23505]: [SQL0803] Duplicate key value specified.

Constraint Test 6: Testing check key of ladder table by giving ladder_discount column values less than 1

Date: November 12, 2019

Description: Confirm check key constraint on ladder_discount column in ladder table by giving values which are less than 0.

Expected Results: If we give ladder_discount value as -1 then it will throw error because check constraint will check whether the values are between 0 and 100

Action: INSERT INTO tp_ladder
VALUES(6,'Orchard Ladder','Orchard',
-1,1000,12,10,5,303);

Actual Result: SQL Error [23513]: [SQL0545] INSERT, UPDATE, or MERGE not allowed by CHECK constraint.

Constraint Test 7: Testing check key of ladder table by giving ladder_discount column values more than 100

Date: November 12, 2019

Description: Confirm check key constraint on ladder_discount column in ladder table by giving values which are greater than 100.

Expected Results: If we give ladder_discount value as 101 then it will throw error because check constraint will check whether the values are between 0 and 100

Action: INSERT INTO tp_ladder
VALUES(6,'Orchard Ladder','Orchard',
101,1000,12,10,5,303);

Actual Result: SQL Error [22003]: [SQL0406]
Conversion error on assignment to column
LADDER_DISCOUNT.

Constraint Test 8: Testing check key of ladder table by giving ladder_rating column values more than 10

Date: November 12, 2019

Description: Confirm check key constraint on ladder_rating column in ladder table by giving values which are greater than 10.

Expected Results: If we give ladder_rating value as 11 then it will throw error because check constraint will check whether the values are between 0 and 10

Action: INSERT INTO tp_ladder
VALUES(8,'Orchard Ladder','Orchard',
10,1000,12,10,11,303);

Actual Result: SQL Error [22003]: [SQL0406]
Conversion error on assignment to column
LADDER_DISCOUNT.

Constraint Test 9: Testing check key of ladder table by giving ladder_rating column values less than 0

Date: November 12, 2019

Description: Confirm check key constraint on ladder_rating column in ladder table by giving values which is less than 0.

Expected Results: If we give ladder_rating value as -1 then it will throw error because check constraint will check whether the values are between 0 and 10

Action: INSERT INTO tp_ladder
VALUES(8,'Orchard Ladder','Orchard',
10,1000,12,10,-1,303);

Actual Result: SQL Error [22003]: [SQL0406]
Conversion error on assignment to column
LADDER_DISCOUNT.

Constraint Test 10: Testing default key of order table

Date: November 12, 2019

Description: Confirm default key constraint on order_date column in order table by not giving any column value.

Expected Results: If we not give any column value for order_date then the query should by default should take todays date.

Action: INSERT INTO

```
tp_order(order_id,order_total,order_quantity,order_tax,la  
dder_id)  
VALUES(211,1000,2,10,2);
```

Actual Result: The data is inserted in to the table and it took todays date as default value.The value is below.Second column is the default date value.

211	2019-11-12	1000.00	2	10.00	2
-----	------------	---------	---	-------	---

Constraint Test 11: Testing default key of warehouse table

Date: November 12, 2019

Description: Confirm default key constraint on warehouse_country column in warehouse table by not giving any column value.

Expected Results: If we not give any column value for warehouse_country then the query should by default should take **Canada**.

Action: INSERT INTO

```
tp_warehouse(warehouse_id,warehouse_name,warehouse_state,warehouse_city,warehouse_zipcode)
VALUES(103,'Prashanth ClimbHigh Ladders private limited','Ontario','Sarnia','Q7T748');
```

Actual Result: The data is inserted in to the table and it took **Canada** as default value.

Constraint Test 12: Testing default key of ladder table

Date: November 12, 2019

Description: Confirm default key constraint on ladder_discount ,ladder_rating columns in ladder table by not giving any column value.

Expected Results: If we not give any column value for ladder_discount, ladder_rating then the query should by default should take **5** for ladder_discount and **10** for ladder_rating.

Action: INSERT INTO

```
tp_ladder(ladder_id,ladder_type,ladder_name,ladder_price,ladder_weight,ladder_height,warehouse_id)
VALUES(11,'Safety Ladder','Safety',1000,11,15,102);
```

Actual Result: The data is inserted in to the table and it took **5** for ladder_discount and **10** for ladder_rating as default value.

Constraint Test 13: Testing primary,foreign key for intersection table of ladder and order(tp_ladder_order)

Date: November 12, 2019

Description: Confirm primary,foreign key constraint on intersection table of tp_ladder_order.

Expected Results: If we give any duplicate values for the combination of order_id and ladder_id then it should throw error.

Action: INSERT INTO tp_ladder_order
VALUES(201,1);

Actual Result: SQL Error [23505]: [SQL0803] Duplicate key value specified.

Constraint Test 14: Testing primary,foreign key for intersection table of ladder and customer(tp_customer_ladder)

Date: November 12, 2019

Description: Confirm primary,foreign key constraint on intersection table of tp_customer_ladder.

Expected Results: If we give any duplicate values for the combination of customer_id and ladder_id then it should throw error.

Action: INSERT INTO tp_customer_ladder
VALUES(301,1)

Actual Result: SQL Error [23505]: [SQL0803] Duplicate key value specified.

Constraint Test 15: Testing primary,foreign key for intersection table of ladder and warehouse(tp_ladder_warehouse)

Date: November 12, 2019

Description: Confirm primary,foreign key constraint on intersection table of tp_ladder_warehouse

Expected Results: If we give any duplicate values for the combination of warehouse_id and ladder_id then it should throw error.

Action: INSERT INTO tp_ladder_warehouse
VALUES(1,101);

Actual Result: SQL Error [23505]: [SQL0803] Duplicate key value specified.