KASPI KZ

ESSAN

DBMS 2.0

GROUP PROJECT

WHO WE ARE?

YERASSYL - TABLES, TUPLES

SHADIYAR - NF

SHYNGYS - ERD

ANNUR - ERD

NURDAULET - TEAM LEADER, NF

EXCEPT THESE MAIN DUTIES WE ARE ALL TRIED TO HELP EACH OTHER, AND WORKED WELL

YERASSYL - PROCEDURE WHICH USES SQL%ROWCOUNT TO DETERMINE THE NUMBER OF ROWS AFFECTED

SHADIYAR - FUNCTION WHICH COUNTS THE NUMBER OF RECORDS

SHYNGYS - PROCEDURE WHICH DOES GROUP BY INFORMATION

ANNUR - ADD USER-DEFINED EXCEPTION WHICH DISALLOWS TO ENTER TITLE OF ITEM (E.G. BOOK) TO BE LESS THAN 5 CHARACTERS

NURDAULET - CREATE A TRIGGER BEFORE INSERT ON ANY ENTITY WHICH WILL SHOW THE CURRENT NUMBER OF ROWS IN THE TABLE

TRIGGER

Creating the trigger

Language SQL Rows 10 Clear Command Find Tables

```
1  CREATE OR REPLACE TRIGGER PRODUCT_PRICE_TRIG
2  BEFORE INSERT ON PRODUCT
3      FOR EACH ROW
4  DECLARE
5      n NUMBER;
6  BEGIN
7      SELECT COUNT(*) INTO n FROM PRODUCT;
8      DBMS_OUTPUT.PUT_LINE('Before insert product table has ' || n || ' values.');
9  END;
10
```

Results Explain Describe Saved SQL History

```
Trigger created.
```

Empty Product Table

PRODUCT

Columns | **Data** | Indexes | Constraints | Grants | Statistics | Triggers | Dependencies | DDL | Sample Queries

+ Insert Row | Columns... | Filter... | Count Rows | Load Data | Download | Refresh

PRODUCT_ID	NAME	QUANTITY	DESCRIPTION	CITY	PRICE	RATING	CATEGORY_ID
31	Eazzy	90	quam nec dui luctus	Rawa	29614	1	61
32	Trupe	147	eleifend quam a o...	Curahuasi	27652	4	62
33	Snaptags	186	arcu libero rutrum ...	Ejidal	32321	1	63
34	Yacero	135	odio curabitur con...	Novi Slankamen	37195	1	64
35	Oyondu	53	et ultrices posuere ...	Shazi	25000	2	65
36	Twitterbeat	58	sed justo pellentes...	Hanjiaji	33628	1	66
37	Blogtags	200	tortor id nulla ultri...	Olivia	10176	5	67
38	Linkbridge	140	nunc rhoncus dui ...	Oyskhara	28164	3	68
39	Twitterbridge	86	eu interdum eu tin...	Butel	19427	2	69
40	Realmix	96	sed ante vivamus t...	Soanindrariny	39913	4	70

Inserting a new row into Product Table

Language PL/SQL Rows 10 Clear Command Find Tables

```
1  INSERT INTO PRODUCT (PRODUCT_ID, NAME, CATEGORY_ID,PRICE, RATING, QUANTITY, DESCRIPTION, CITY)
2  VALUES (11, 'Banana', 71, 3700, 5, 100,'yellow banana', 'Aktau');
```

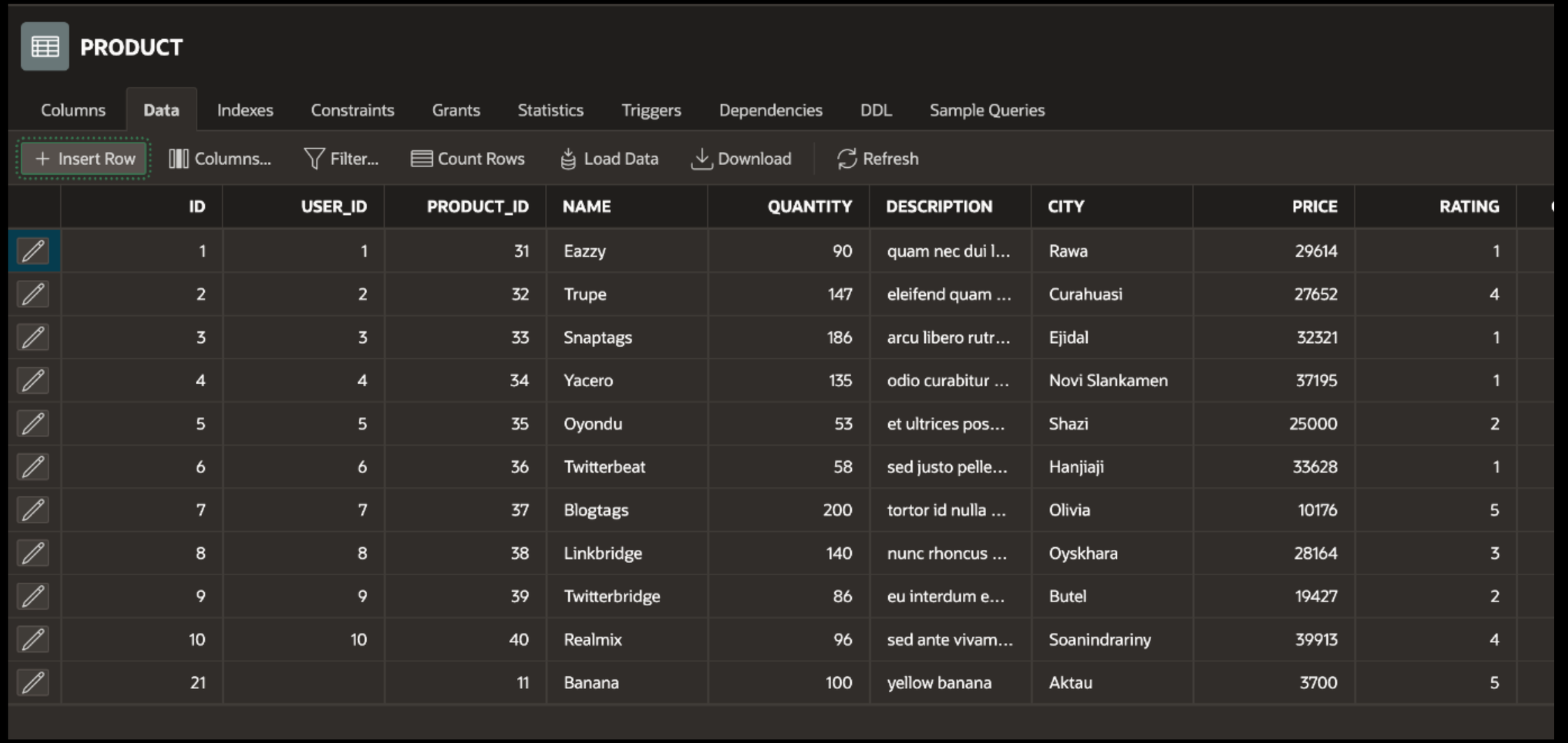
Results Explain Describe Saved SQL History

```
Before insert product table has 10 values.

1 row(s) inserted.
```

Message that proofs that trigger is active

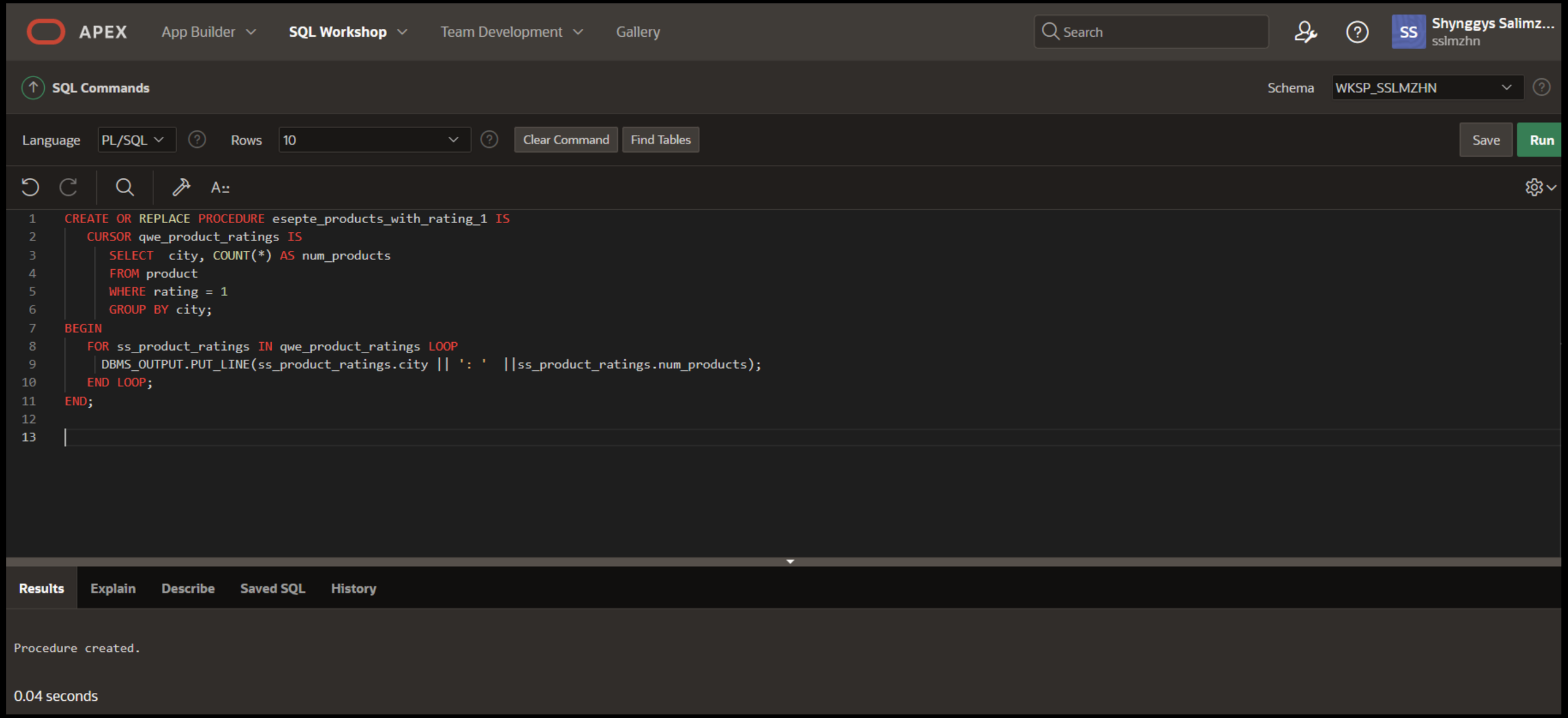
Product table with a inserted new row



ID	USER_ID	PRODUCT_ID	NAME	QUANTITY	DESCRIPTION	CITY	PRICE	RATING
1	1	31	Eazzy	90	quam nec dui l...	Rawa	29614	1
2	2	32	Trupe	147	eleifend quam ...	Curahuasi	27652	4
3	3	33	Snaptags	186	arcu libero rutr...	Ejidal	32321	1
4	4	34	Yacero	135	odio curabitur ...	Novi Slankamen	37195	1
5	5	35	Oyondu	53	et ultrices pos...	Shazi	25000	2
6	6	36	Twitterbeat	58	sed justo pelle...	Hanjiaji	33628	1
7	7	37	Blogtags	200	tortor id nulla ...	Olivia	10176	5
8	8	38	Linkbridge	140	nunc rhoncus ...	Oyskhara	28164	3
9	9	39	Twitterbridge	86	eu interdum e...	Butel	19427	2
10	10	40	Realmix	96	sed ante vivam...	Soanindrariny	39913	4
21		11	Banana	100	yellow banana	Aktau	3700	5

PROCEDURE WHICH DOES GROUP BY INFORMATION

Creating the procedure



Empty Product Table

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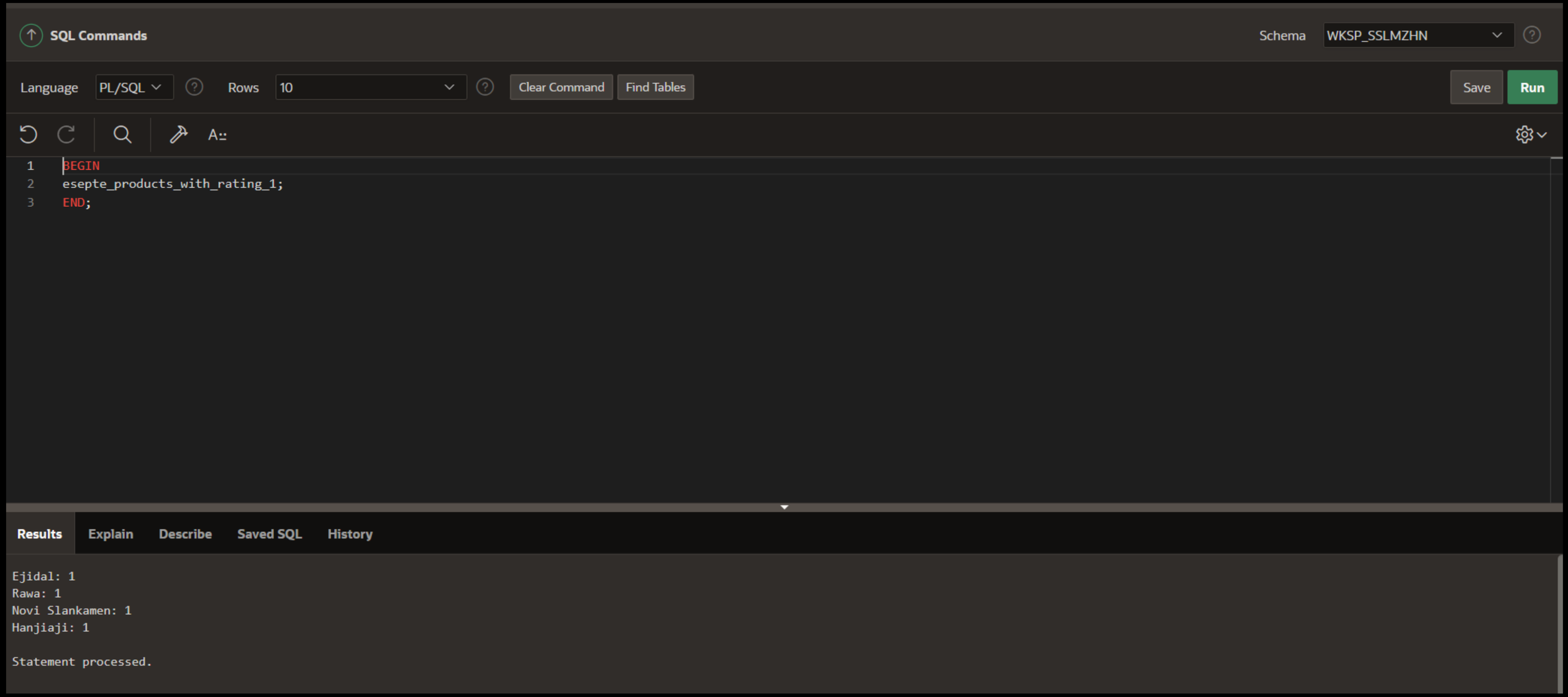
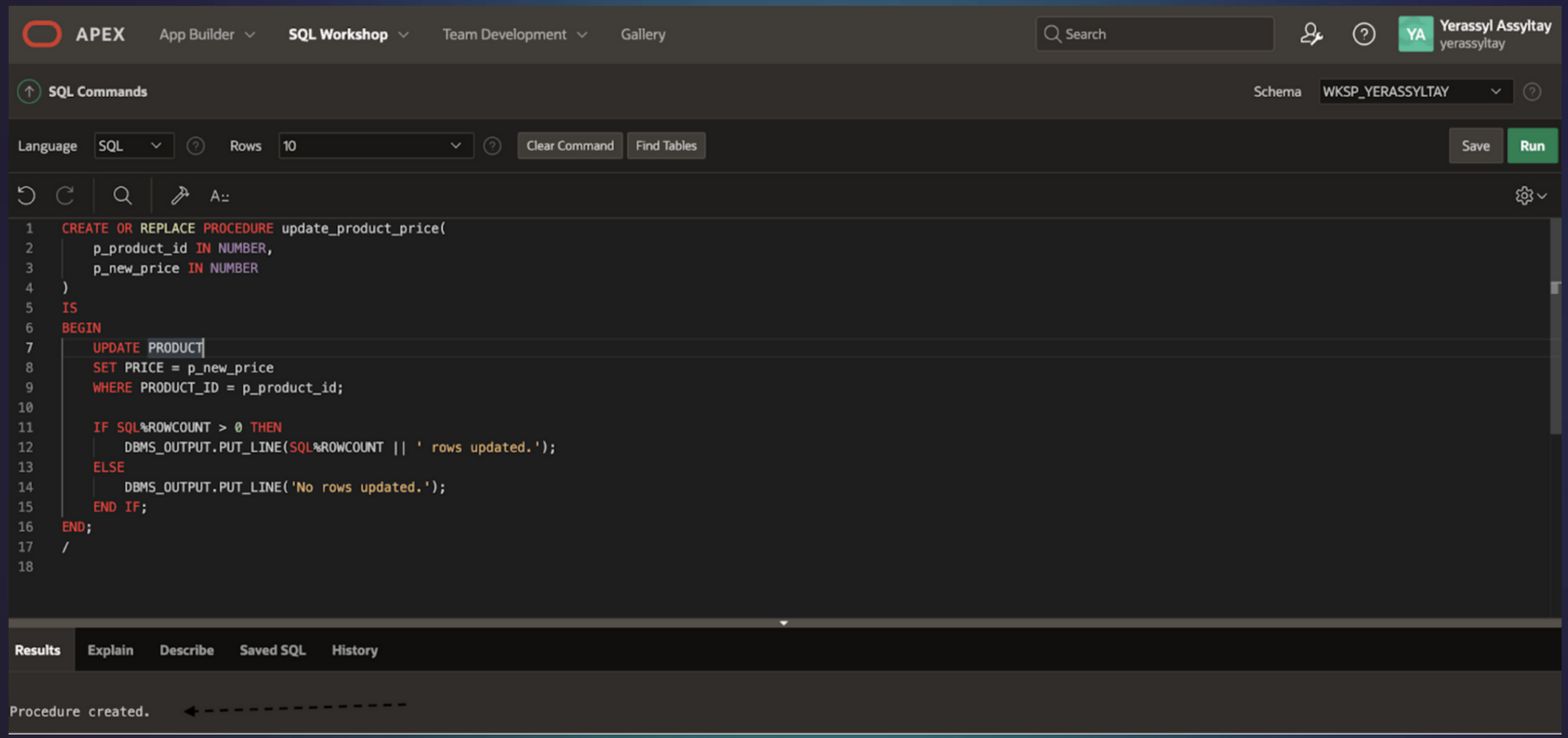
In result we will see this



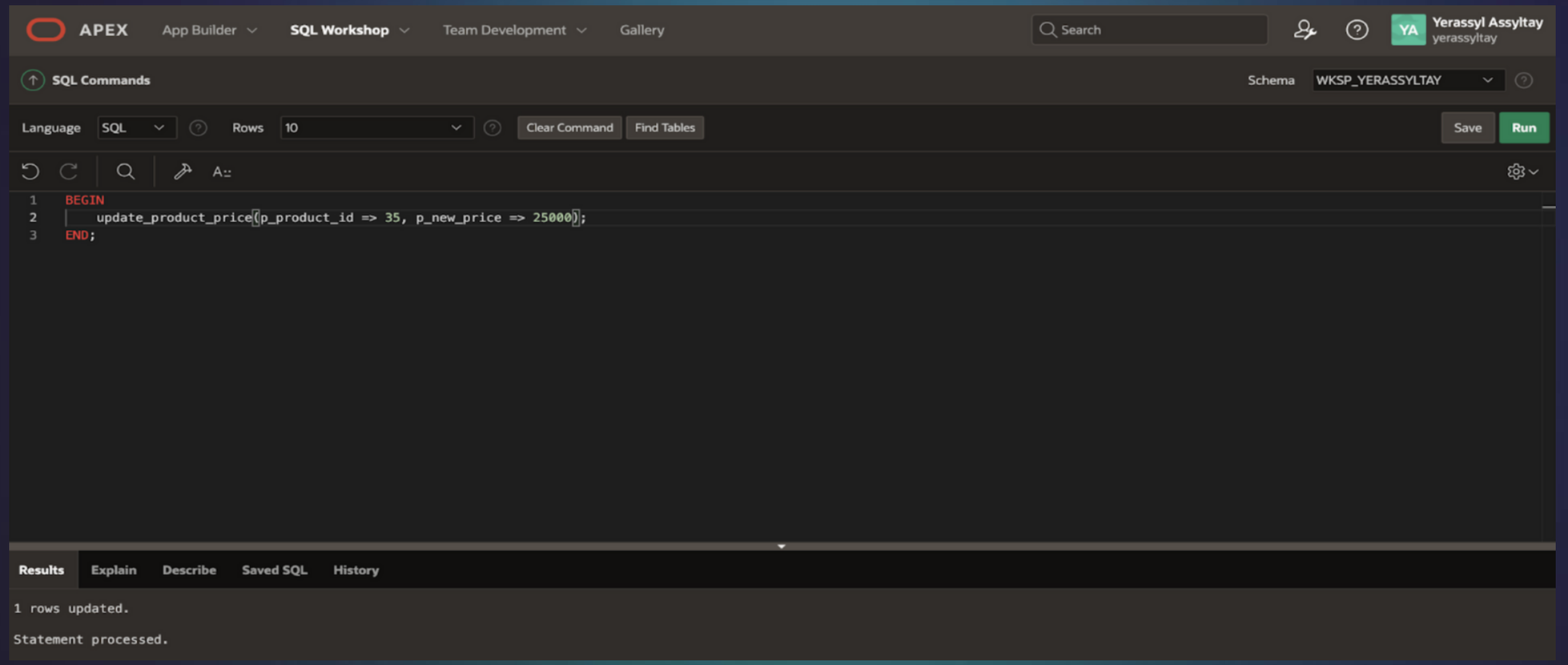
OKAY, NOW WE WILL LOOK AT ONE OF THE BASIC CONSTRUCTS IN PL/SQL PROCEDURES.

IN THIS EXAMPLE, THE PROCEDURE TAKES A PRODUCT ID AND A NEW PRICE AS INPUT PARAMETERS AND UPDATES THE PRICES OF THE CORRESPONDING PRODUCT IN THE "PRODUCT" TABLE.



THE SQL%ROWCOUNT ATTRIBUTE IS USED TO DETERMINE THE NUMBER OF ROWS UPDATED BY THE UPDATE STATEMENT.

and we will write requests



SO WE SEE HERE THE PRICE HAS BEEN CHANGED AND OUR CODE WORKED

PRODUCT

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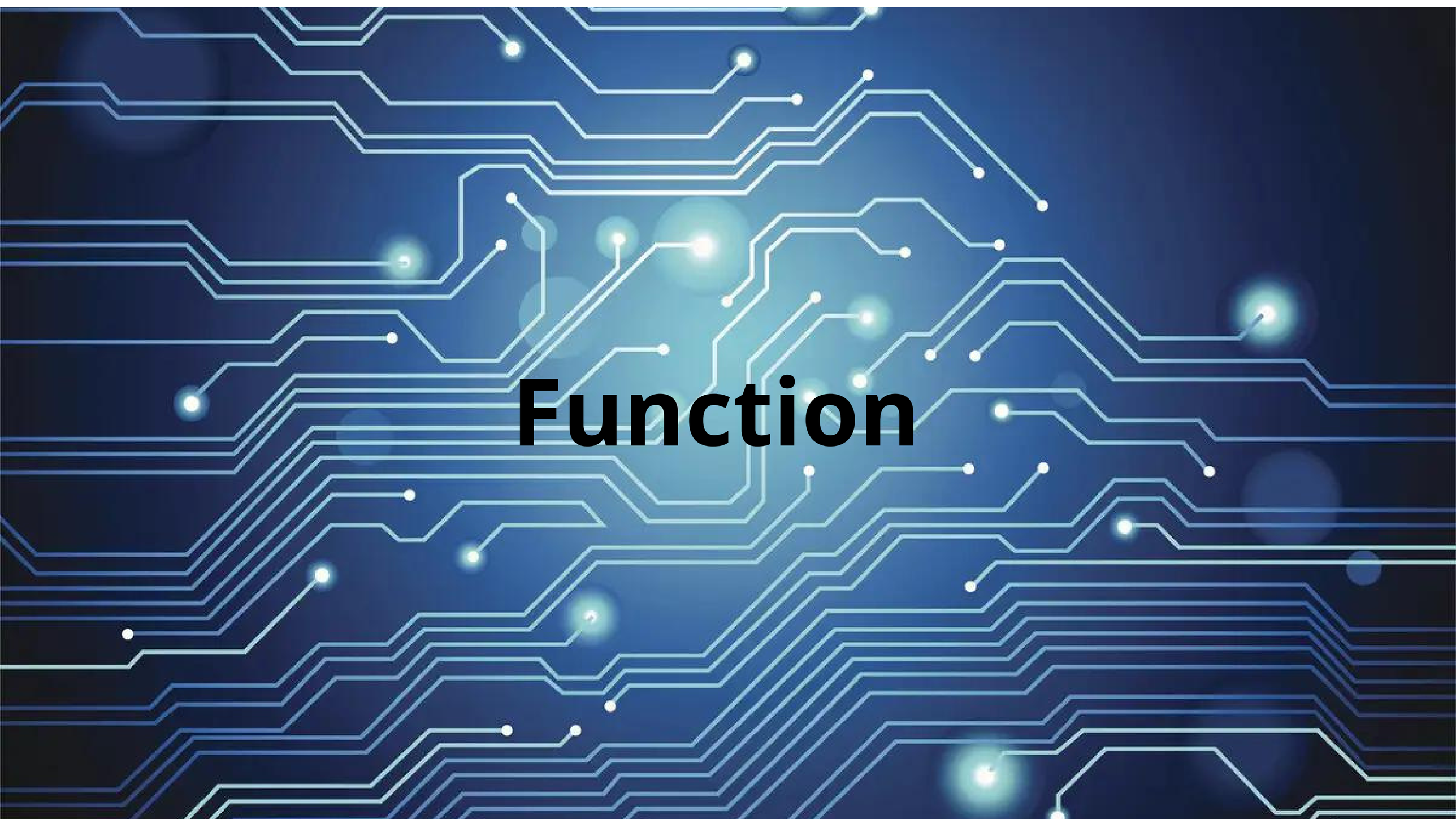
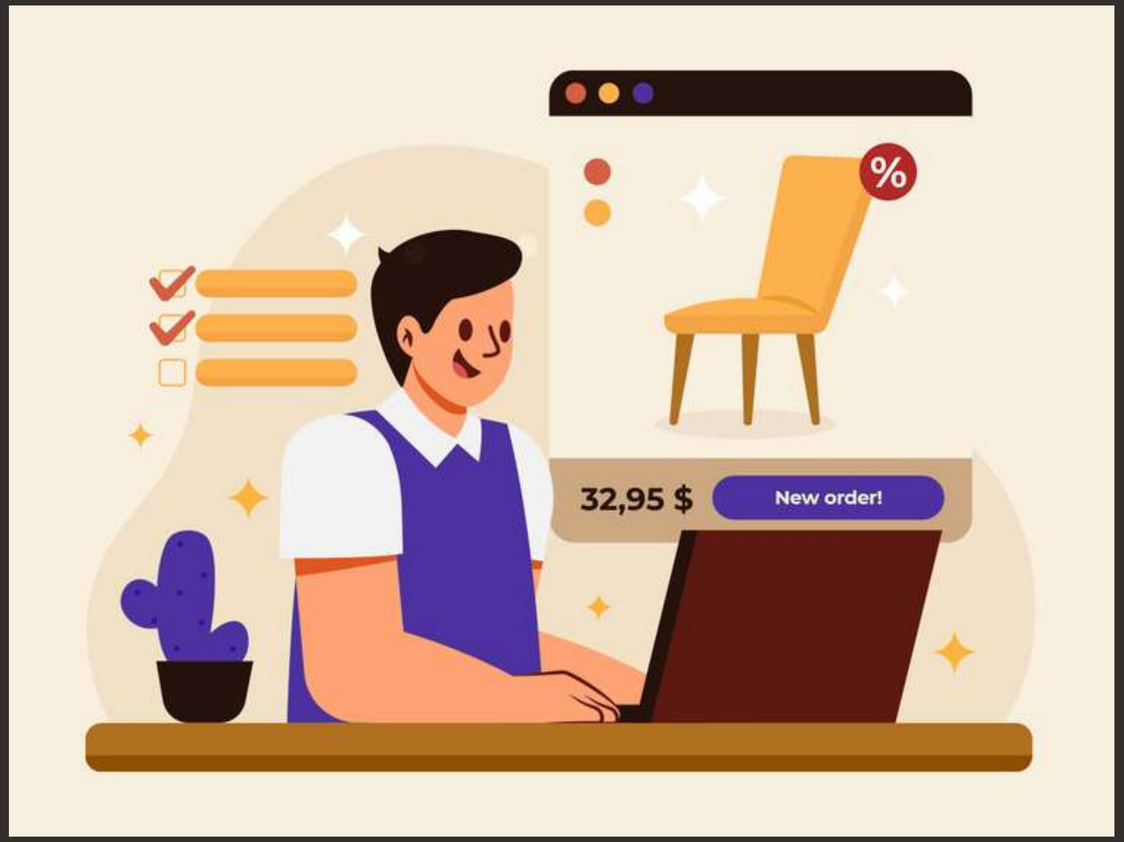

Function




```
1   create or replace FUNCTION count_orders
2       RETURN NUMBER
3   IS
4       count_order NUMBER;
5   BEGIN
6       SELECT COUNT(order_id) INTO count_order FROM orders;
7       RETURN count_order;
8   END;
9   /
```

Results | Explain | Describe | Saved SQL | History

```
Function created.
```

```
1   select count_orders from dual
```

Results | Explain | Describe | Saved SQL | History

COUNT_ORDERS
10

```sql
create or replace FUNCTION get_avg_rating(rating IN VARCHAR2)
RETURN NUMBER
IS
  l_avg_rating NUMBER;
BEGIN
  SELECT AVG(TO_NUMBER(rating))
  INTO l_avg_rating
  FROM product;
  RETURN l_avg_rating;
EXCEPTION
  WHEN NO_DATA_FOUND THEN
    RETURN NULL;
END;
/
```

Results | Explain | Describe | Saved SQL | History

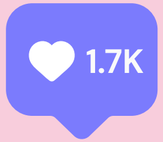
Function created.

```
1   select get_avg_rating ('rating') as av_rating
2   from dual;
```

Results | Explain | Describe | Saved SQL | History

AV_RATING
2.4

1 rows returned in 0.12 seconds Download



THANK YOU FOR YOUR ATTENTION