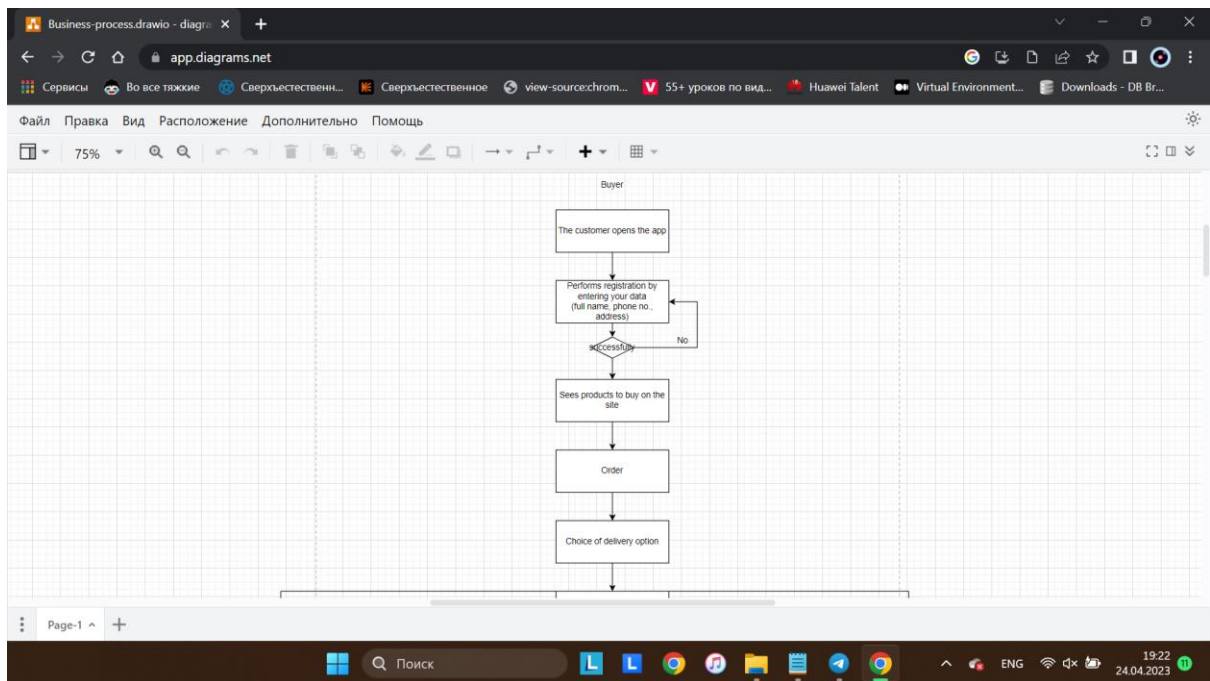


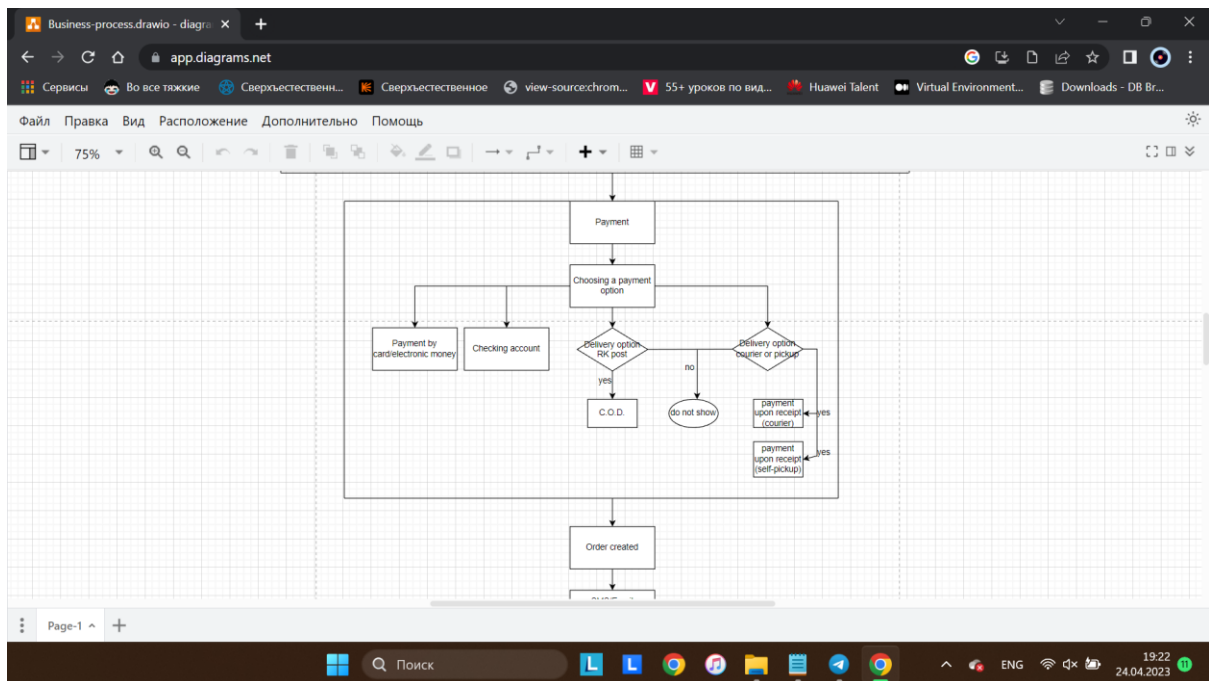
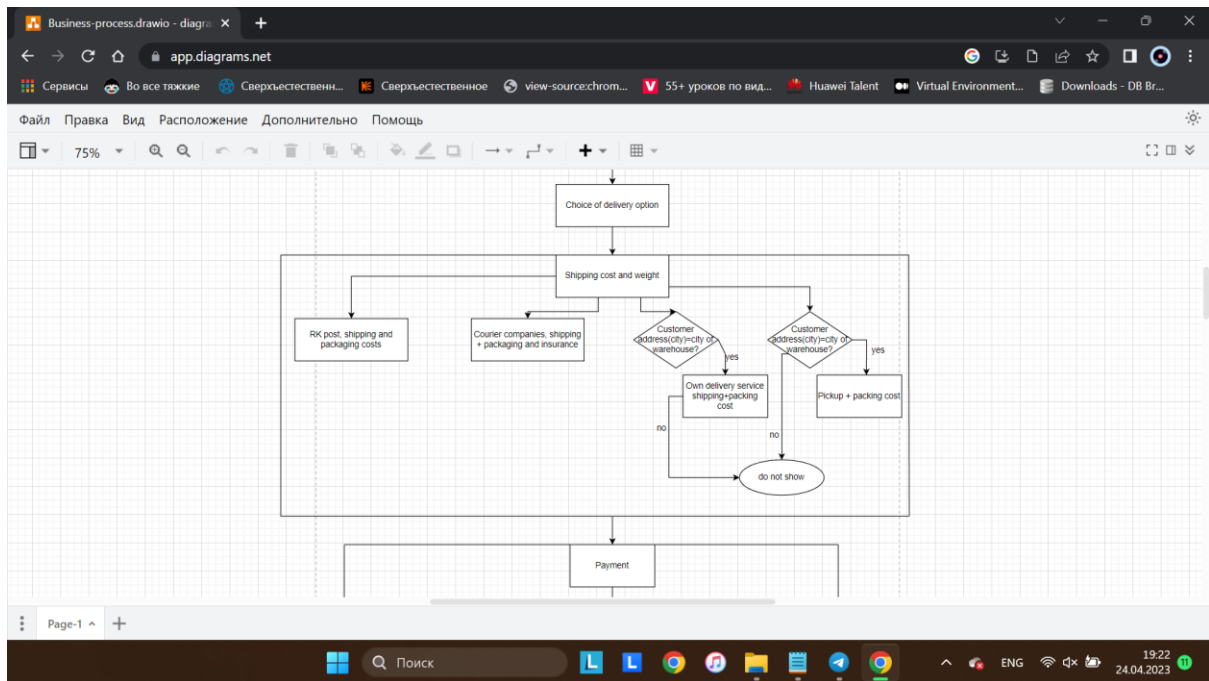


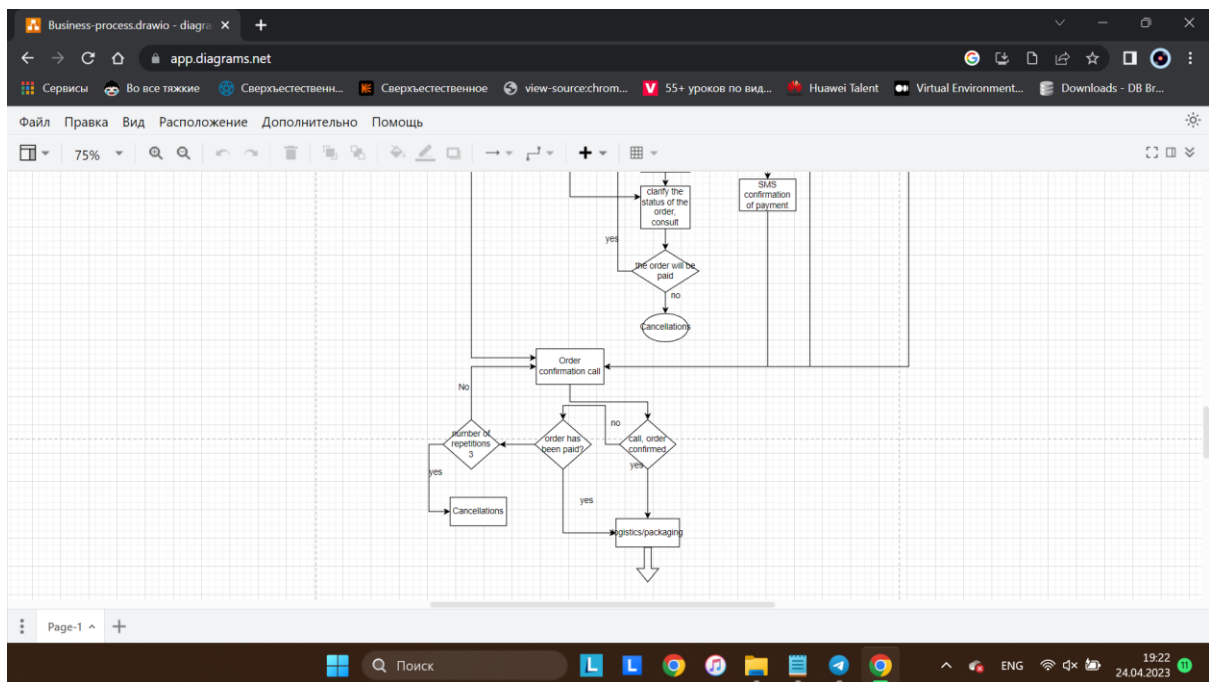
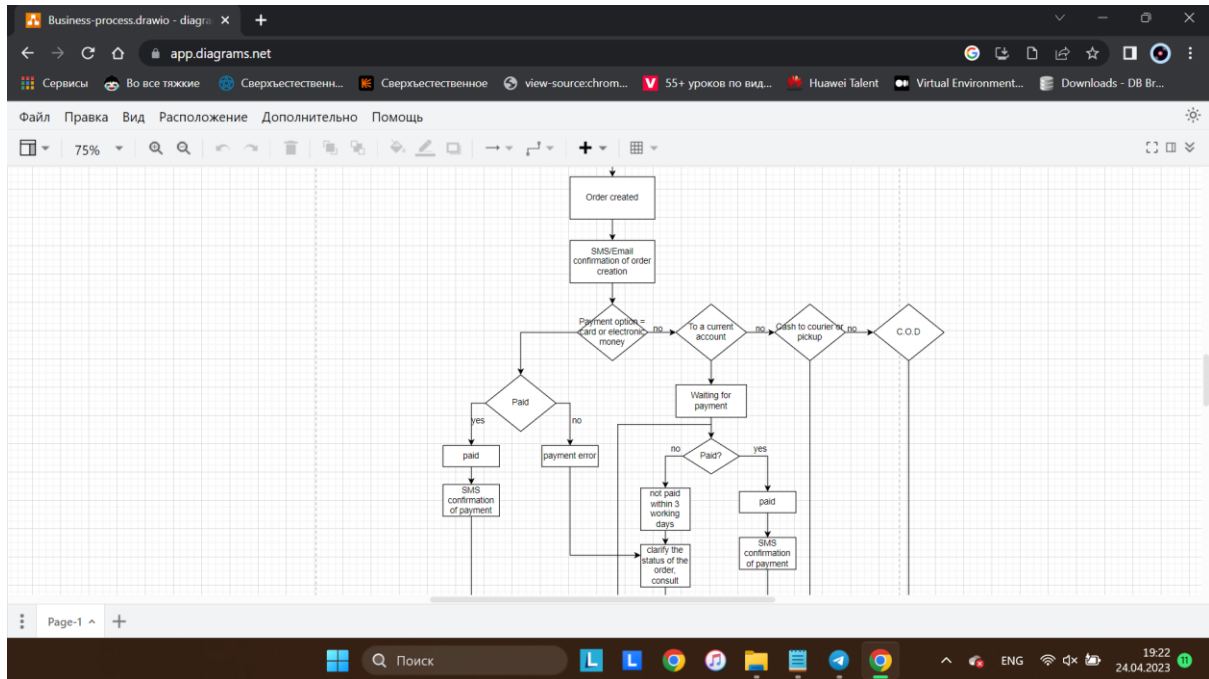
Introduction

the essence of the project is the database of an online store that will store records about all stages of customer interaction with the store , as well as the information needed by the customer and the store . Such as the price of the goods and information about the company and brand , the seller and the buyer , as well as the price of the product and the costs of the transaction itself such as the date, price ,delivery code and the delivery itself

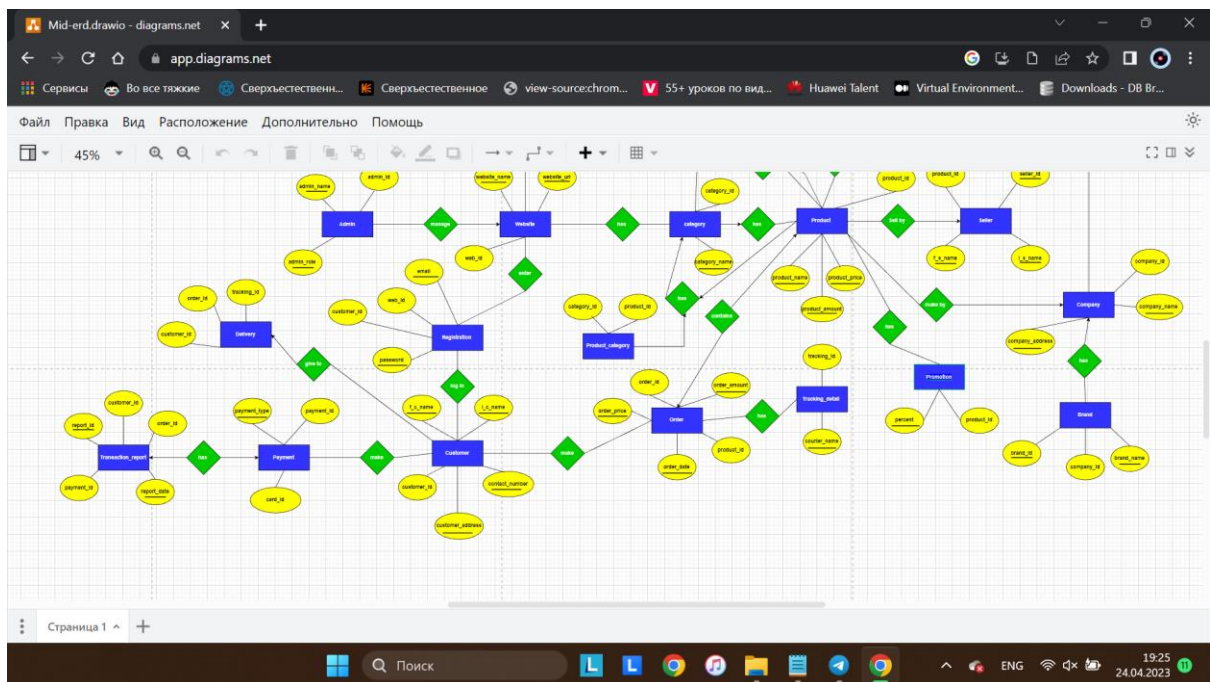
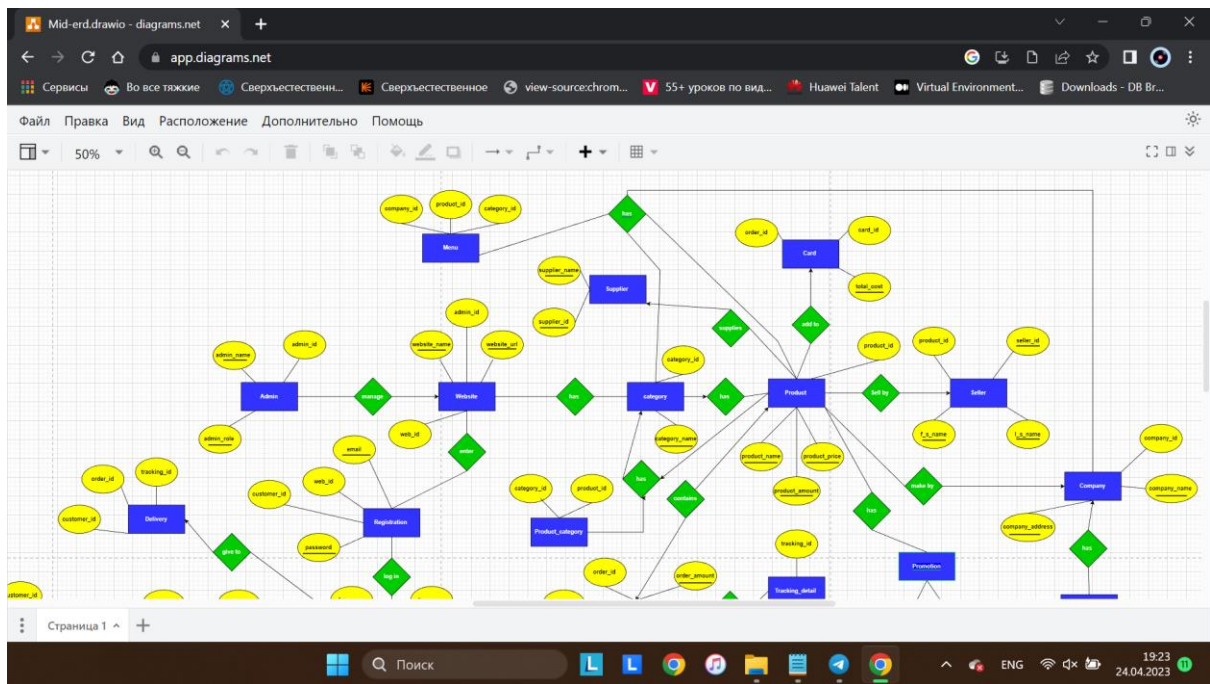
business plan -

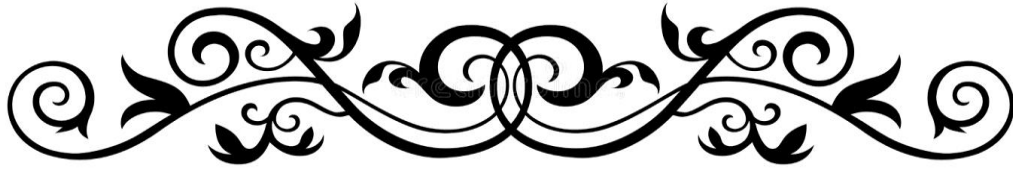






Erd





procedures, functions , trigger and exception with a general explanation of the work are given below -

1. Procedure which does group by information:

```
DECLARE
```

```
CURSOR cur_order IS
```

```
SELECT REPORT_DATE, COUNT(REPORT_ID) AS count_res
```

```
FROM TRANSACTION_REPORT
```

```
GROUP BY REPORT_DATE;
```

```
BEGIN
```

```
FOR rec_order IN cur_order LOOP
```

```
    dbms_output.put_line('Report date: ' || rec_order.REPORT_DATE || ', Result: ' ||  
rec_order.count_res);
```

```
END loop;
```

```
END;
```

```
// Using this procedure, we can get information about how many reports were on a certain date
```


SQL Commands

apex.oracle.com/pls/apex/r/apex/sql-workshop/sqlcommandprocessor?session=2895485029656

Сервисы Во все тяжкие Сверхъестественное Сверхъестественное view-source:chrom... 55+ уроков по вид... Huawei Talent Virtual Environment... Downloads - DB Br...

APEX App Builder SQL Workshop Team Development Gallery

SQL Commands Schema WKSP_SCHEMA

Language PL/SQL Rows 10 Clear Command Find Tables Save Run

```
1 UNLAP BY REPURTI DATE;  
2  
3  
4  
5  
6 BEGIN  
7   FOR rec_trans_rep IN cur_trans_rep LOOP  
8     dbms_output.put_line('Report date: ' || rec_trans_rep.REPORT_DATE || ', Result: ' || rec_trans_rep.count_res);  
9   END LOOP;  
10  
11
```

Results Explain Describe Saved SQL History

Report date: 12/19/2021, Result: 1
Report date: 11/29/2022, Result: 1
Report date: 12/04/2022, Result: 1
Report date: 08/27/2022, Result: 1
Report date: 03/04/2022, Result: 2
Report date: 03/08/2022, Result: 1
Report date: 06/23/2022, Result: 1
Report date: 02/11/2022, Result: 1
Report date: 07/02/2022, Result: 1
Report date: 18/03/2022, Result: 1
Report date: 05/05/2022, Result: 1
Report date: 11/22/2022, Result: 1
Report date: 12/04/2022, Result: 2
Report date: 08/11/2022, Result: 1

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SQL Commands

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11
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Report date: 03/08/2022, Result: 1
Report date: 06/23/2022, Result: 1
Report date: 02/11/2022, Result: 1
Report date: 07/02/2022, Result: 1
Report date: 18/03/2022, Result: 1
Report date: 05/05/2022, Result: 1
Report date: 11/22/2022, Result: 1
Report date: 12/04/2022, Result: 2
Report date: 08/11/2022, Result: 1

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SQL Commands

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APEX App Builder SQL Workshop Team Development Gallery

SQL Commands Schema WKSP_SQEDU

Language PL/SQL Rows 10 Clear Command Find Tables Save Run

```
1 GROUP BY REFUND_DATE;  
2  
3  
4  
5  
6 BEGIN  
7   FOR rec_trans_rep IN cur_trans_rep LOOP  
8     dbms_output.put_line('Report date: ' || rec_trans_rep.REPORT_DATE || ', Result: ' || rec_trans_rep.count_res);  
9   END LOOP;  
10  
11 END;
```

Results Explain Describe Saved SQL History

Report date: 12/19/2021, Result: 1
Report date: 11/29/2022, Result: 1
Report date: 12/04/2022, Result: 1
Report date: 08/22/2022, Result: 1
Report date: 01/30/2022, Result: 2
Report date: 01/08/2022, Result: 1
Report date: 06/23/2022, Result: 1
Report date: 02/11/2022, Result: 1
Report date: 07/02/2022, Result: 1
Report date: 10/03/2022, Result: 1
Report date: 05/05/2022, Result: 1
Report date: 11/22/2022, Result: 1
Report date: 12/08/2022, Result: 2
Report date: 08/11/2022, Result: 1

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210103364@stu.sdu.edu.kz sqdu en

Поиск

18:46 24.04.2023

SQL Commands

apex.oracle.com/pls/apex/r/apex/sql-workshop/sqlcommandprocessor?session=2895485029656

Сервисы Во все тяжкие Сверхъестественное Сверхъестественное view-source:chrom... 55+ уроков по вид... Huawei Talent Virtual Environment... Downloads - DB Br...

APEX App Builder SQL Workshop Team Development Gallery

SQL Commands Schema WKSP_SQEDU

Language PL/SQL Rows 10 Clear Command Find Tables Save Run

```
1 GROUP BY REFUND_DATE;  
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3  
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6 BEGIN  
7   FOR rec_trans_rep IN cur_trans_rep LOOP  
8     dbms_output.put_line('Report date: ' || rec_trans_rep.REPORT_DATE || ', Result: ' || rec_trans_rep.count_res);  
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11 END;
```

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Report date: 06/23/2022, Result: 1
Report date: 02/11/2022, Result: 1
Report date: 07/02/2022, Result: 1
Report date: 10/03/2022, Result: 1
Report date: 05/05/2022, Result: 1
Report date: 11/22/2022, Result: 1
Report date: 12/08/2022, Result: 2
Report date: 08/11/2022, Result: 1

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APEX App Builder SQL Workshop Team Development Gallery

SQL Commands Schema WKSP_SCHEMA

Language PL/SQL Rows 10 Clear Command Find Tables Save Run

```
1 UNLAP BY REPUNI_DATE;  
2  
3  
4  
5  
6 BEGIN  
7   FOR rec_trans_rep IN cur_trans_rep LOOP  
8     dbms_output.put_line('Report date: ' || rec_trans_rep.REPORT_DATE || ', Result: ' || rec_trans_rep.count_res);  
9   END LOOP;  
10  
11
```

Results Explain Describe Saved SQL History

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Report date: 02/11/2022, Result: 1
Report date: 07/02/2022, Result: 1
Report date: 18/03/2022, Result: 1
Report date: 05/05/2022, Result: 1
Report date: 11/22/2022, Result: 1
Report date: 12/04/2022, Result: 2
Report date: 08/11/2022, Result: 1

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SQL Commands

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Сервисы Во все тяжкие Сверхъестественное Сверхъестественное view-source:chrom... 55+ уроков по вид... Huawei Talent Virtual Environment... Downloads - DB Br...

APEX App Builder SQL Workshop Team Development Gallery

SQL Commands Schema WKSP_SCHEMA

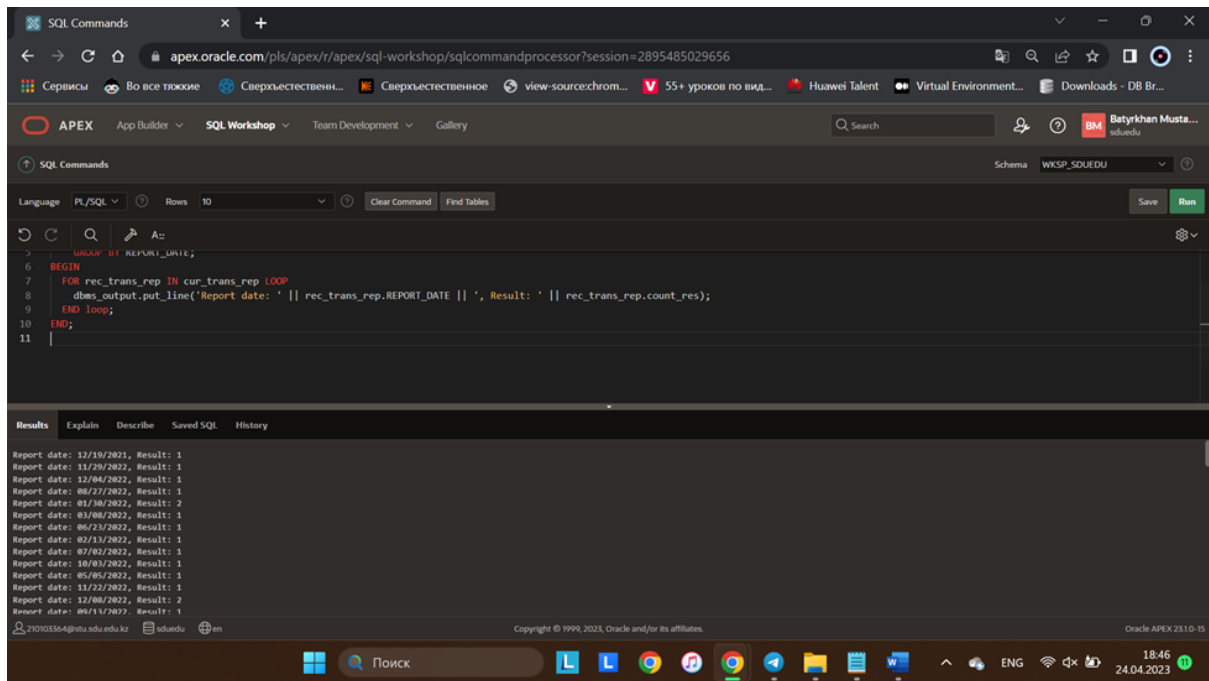
Language PL/SQL Rows 10 Clear Command Find Tables Save Run

```
1 UNLAP BY REPUNI_DATE;  
2  
3  
4  
5  
6 BEGIN  
7   FOR rec_trans_rep IN cur_trans_rep LOOP  
8     dbms_output.put_line('Report date: ' || rec_trans_rep.REPORT_DATE || ', Result: ' || rec_trans_rep.count_res);  
9   END LOOP;  
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11
```

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Report date: 11/22/2022, Result: 1
Report date: 12/04/2022, Result: 2
Report date: 08/11/2022, Result: 1

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2. Function which counts the number of records:

DECLARE

rec_count INTEGER;

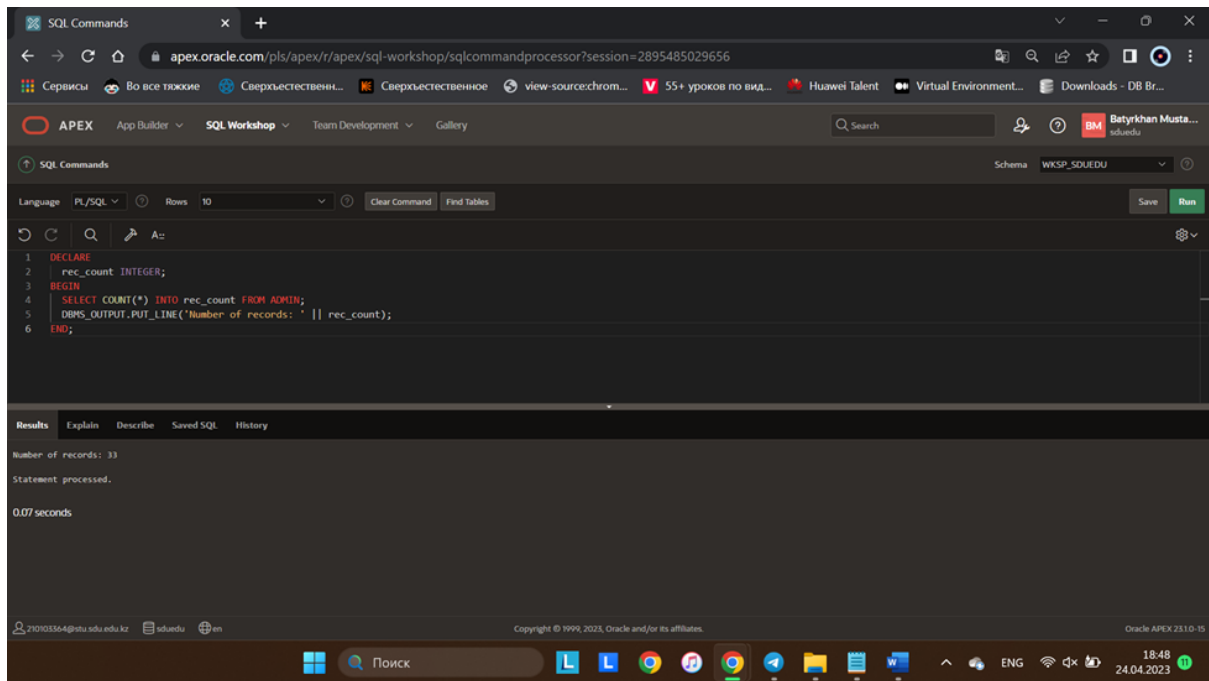
BEGIN

SELECT COUNT(*) INTO rec_count FROM ADMIN;

DBMS_OUTPUT.PUT_LINE('Number of records: ' || rec_count);

END;

// This procedure counts all administrators that we have



3. Procedure which uses SQL%ROWCOUNT to determine the number of rows affected:

```
CREATE OR REPLACE PROCEDURE rowcount
```

```
AS
```

```
i NUMBER;
```

```
BEGIN
```

```
UPDATE BRAND
```

```
SET brand_name = brand_name + '_save_animals!'
```

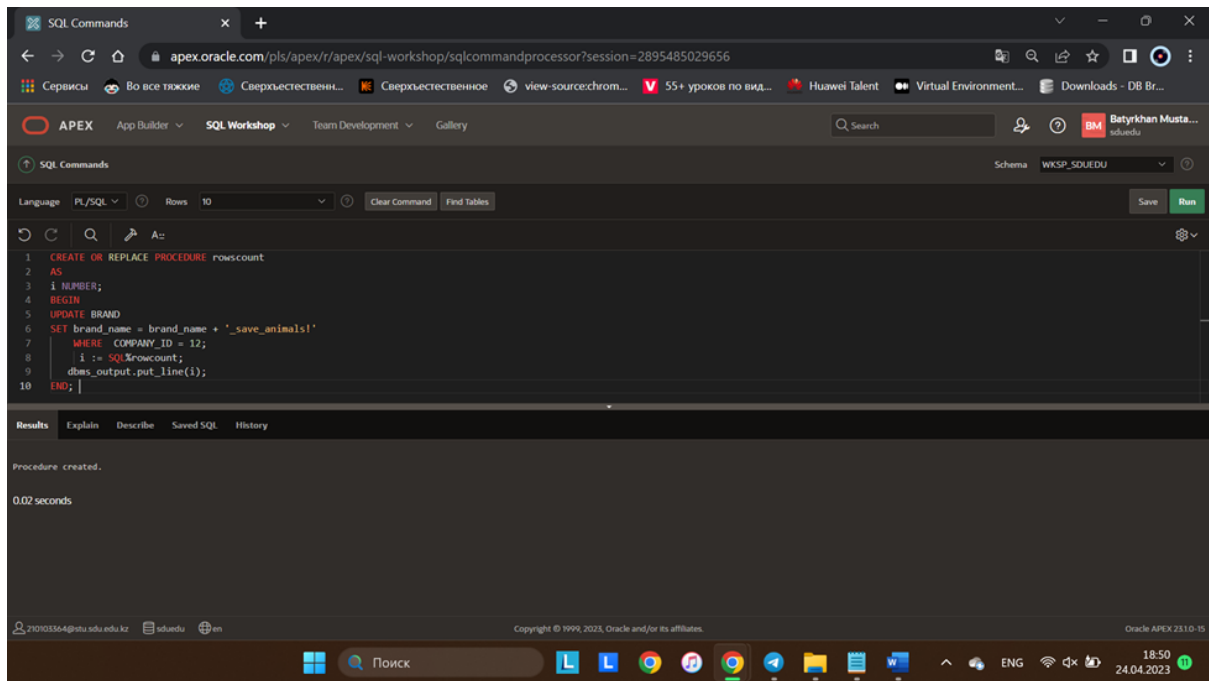
```
WHERE COMPANY_ID = 12;
```

```
i := SQL%rowcount;
```

```
dbms_output.put_line(i);
```

```
END;
```

// A certain company, if desired, can start presenting its products as brands of a charity organization by adding the slogan “save_animals” to the name



4. Add user-defined exception which disallows to enter title of item (e.g. book) to be less than 5 characters:

DECLARE

less_than_5_character EXCEPTION;

title Website.website_name%type;BEGIN

BEGIN

IF LENGTH(title) < 5 THEN

RAISE less_than_5_character;

END IF;

EXCEPTION

WHEN less_than_5_character THEN

dbms_output.put_line('TITLE_CANNOT_BE_LESS_THAN_5_CHARACTER');

RAISE;

END;

EXCEPTION

```

        WHEN less_than_5_character THEN

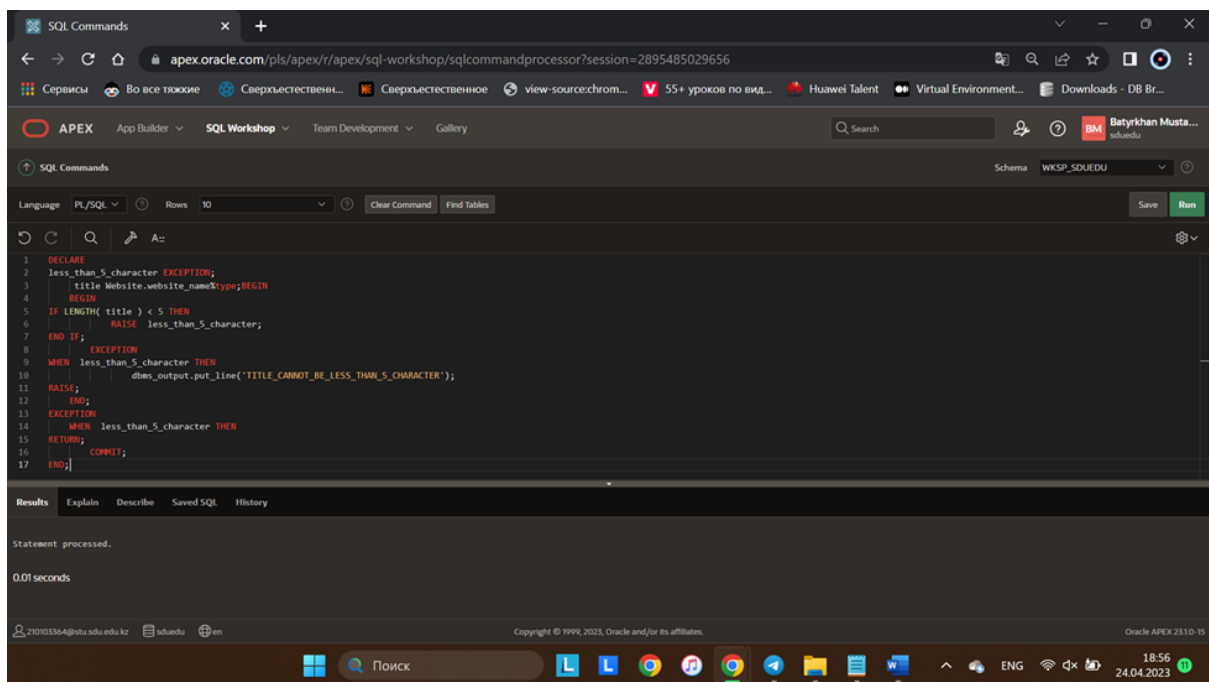
RETURN;

        COMMIT;

END;

```

// A special exception that will rise if the length of the entered site name in the website table does not reach the norm (there are 5 letters here)



5.Create a trigger before insert on any entity which will show the current number of rows in the table:

```

CREATE OR REPLACE TRIGGER NUMBER_OF_TRANSACTIONS
BEFORE INSERT ON TRANSACTION_REPORT

DECLARE

RES INT;

```

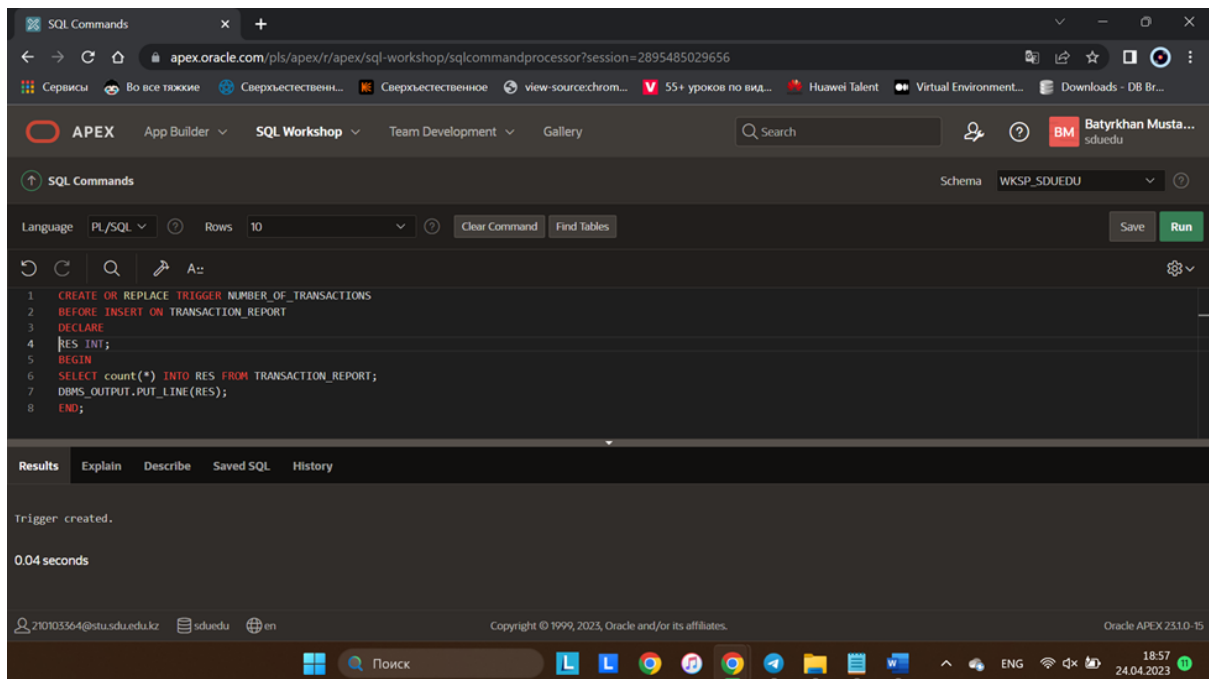
```
BEGIN
```

```
SELECT count(*) INTO RES FROM TRANSACTION_REPORT;
```

```
DBMS_OUTPUT.PUT_LINE(RES);
```

```
END;
```

// A trigger that will output the number of transactions in the table before entering a new element



All tables are in third normal form because none of them have a transitive dependency ,
all the attributes are functionally dependent on solely the primary key and all tables in the second normal form relation where non prime attributes depend only on the candidate keys

ID	BRAND_ID	BRAND_NAME	COMPANY_ID
1	1	Tagpad	13
2	2	Omiba	5
3	3	Eadel	10
4	4	Yodel	1
5	5	Plajo	4
6	6	Kanoodle	12
7	7	Skajo	6
8	8	Oyope	7
9	9	Skibox	14
10	10	Tambee	3