Lab report #1
Sadovskaya Veronika
GitHub: https://github.com/sdveronika/DataMola22

Task 1 - CREATE Storage Objects

1) Create sa_t_dish

```
CREATE TABLE sa_restaurants.sa_t_dish(
  dish_name VARCHAR2(20),
  dish_category VARCHAR2(20),
  price DECIMAL (10,2),
  composition VARCHAR2(150),
  weight DECIMAL (10,2),
  dish_status CHAR(2) CHECK (dish_status IN ('N','Y'))
)TABLESPACE ts_sa_restaurants_data_01;
```

Script Output x

Task completed in 0,048 seconds

Table SA_RESTAURANTS.SA_T_DISH created.

2) Create sa_t_restaurant

```
CREATE TABLE sa_restaurants.sa_t_restaurant(
  phone VARCHAR2(20),
  email VARCHAR2(40),
  street VARCHAR2(40),
  country VARCHAR2(20),
  city VARCHAR2(20),
  building INT,
  apartment INT,
  restaurant_status CHAR(1) CHECK (restaurant_status IN ('N','Y'))
)TABLESPACE ts_sa_restaurants_data_01;
```

Script Output x

Task completed in 0,038 seconds

Table SA_RESTAURANTS.SA_T_RESTAURANT created.

3) Create sa_t_client

```
CREATE TABLE sa_clients.sa_t_client(
  first_name VARCHAR2(20),
  last_name VARCHAR2(20),
  phone VARCHAR2(20),
  email VARCHAR2(40),
  street VARCHAR2(40),
  country VARCHAR2(20),
  city VARCHAR2(20),
  client_status CHAR(1) CHECK (client_status IN ('N','Y'))
)TABLESPACE ts_sa_clients_data_01;
```

Script Output x

Task completed in 0,052 seconds

Table SA_CLIENTS.SA_T_CLIENT created.

4) Create sa_t_payment_method

```
CREATE TABLE sa_restaurants.sa_t_payment_method(
payment_method_name VARCHAR2(20),
payment_method_status CHAR(1) CHECK (payment_method_status IN ('N','Y'))
) TABLESPACE ts_sa_restaurants_data_01;
```

Script Output ×

Task completed in 0,043 seconds

```
Table SA_RESTAURANTS.SA_T_PAYMENT_METHOD created.
```

5) Create sa_t_gen_period

```
CREATE TABLE sa_restaurants.sa_t_gen_period (
    valid_from      DATE ,
    valid_to        DATE ,
    promotion_name  VARCHAR2(100) ,
    promotion_percent DECIMAL (4,2),
    decription      VARCHAR2(100)
)TABLESPACE ts_sa_restaurants_data_01;
```

Script Output ×

Task completed in 0,046 seconds

```
Table SA_RESTAURANTS.SA_T_GEN_PERIOD created.
```

6) Create sa_t_employee

```
CREATE TABLE sa_restaurants.sa_t_employee(
first_name VARCHAR2(20),
last_name VARCHAR2(20),
phone VARCHAR2(20),
email VARCHAR2(40),
department VARCHAR2(20),
job_title VARCHAR2(20),
street VARCHAR2(40),
country VARCHAR2(20),
city VARCHAR2(20),
building INT,
apartment INT,
employee_status CHAR(1) CHECK (employee_status IN ('N','Y')))
TABLESPACE ts_sa_restaurants_data_01;
```

Script Output ×

Task completed in 0,051 seconds

```
Table SA_RESTAURANTS.SA_T_EMPLOYEE created.
```

7) Create sa_t_transaction
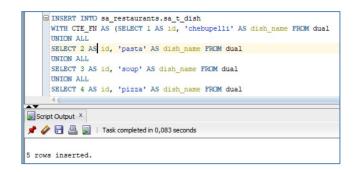
```sql
CREATE TABLE sa_orders.sa_t_transaction(
--
first_name_c VARCHAR2(20),
last_name_c VARCHAR2(20),
phone_c VARCHAR2(20),
email_c VARCHAR2(40),
street_c VARCHAR2(40),
country_c VARCHAR2(20),
city_c VARCHAR2(20),
client_status CHAR(1) CHECK (client_status IN ('N','Y')),
--
dish_name VARCHAR2(20),
```

Script Output ×

Task completed in 0,084 seconds

Table SA_ORDERS.SA_T_TRANSACTION created.

Task 2 - Generate Test Data in Storage Layers

1) Generate test data for the table sa_t_dish

```sql
INSERT INTO sa_restaurants.sa_t_dish
WITH CTE_FN AS (SELECT 1 AS id, 'chebupelli' AS dish_name FROM dual
UNION ALL
SELECT 2 AS id, 'pasta' AS dish_name FROM dual
UNION ALL
SELECT 3 AS id, 'soup' AS dish_name FROM dual
UNION ALL
SELECT 4 AS id, 'pizza' AS dish_name FROM dual
```

Script Output ×

Task completed in 0,083 seconds

5 rows inserted.

```sql
SELECT * FROM sa_restaurants.sa_t_dish;
```

Script Output × Query Result ×

SQL | All Rows Fetched: 5 in 0,063 seconds

	DISH_NAME	DISH_CATEGORY	PRICE	COMPOSITION	WEIGHT	DISH_STATUS
1	chebupelli	hot	13	chebupelli ingredients	134	Y
2	pasta	hot	89	pasta ingredients	885	Y
3	soup	hot	18	soup ingredients	119	Y
4	pizza	hot	69	pizza ingredients	780	Y
5	greek salad	appetizer	86	greek salad ingredients	405	Y

2) Generate test data for the table sa_t_restaurant

```sql
INSERT INTO sa_restaurants.sa_t_restaurant
WITH CTE_FN AS (
SELECT 1 AS id, 'Belarus' AS country FROM dual
UNION ALL
SELECT 2 AS id, 'Russia' AS country FROM dual
UNION ALL
SELECT 3 AS id, 'USA' AS country FROM dual
UNION ALL
SELECT 4 AS id, 'Ukraine' AS country FROM dual
UNION ALL
SELECT 5 AS id, 'Poland' AS country FROM dual
```

Script Output ×

Task completed in 0,055 seconds

Table SA_RESTAURANTS.SA_T_RESTAURANT created.

5 rows inserted.

```
SELECT * FROM sa_restaurants.sa_t_restaurant;
```

Script Output × | Query Result ×
SQL | All Rows Fetched: 5 in 0,023 seconds

	PHONE	EMAIL	STREET	COUNTRY	CITY	BUILDING	APARTMENT	RESTAURANT_STATUS
1	375295646394	1@mail.ru	Yesenin	Belarus	Minsk	48	20	Y
2	375295690128	2@mail.ru	Nikolskaya	Russia	Moscow	69	103	Y
3	375291065310	3@mail.ru	Fifth Avenue	USA	New York	77	83	Y
4	375292392973	4@mail.ru	Vladimirskaya	Ukraine	Kiev	29	238	Y
5	375290801712	5@mail.ru	Gurchevskaya	Poland	Warsaw	60	155	Y

3) Generate test data for the table sa_t_client


```
INSERT INTO sa_clients.sa_t_client
WITH CTE_FN AS (
SELECT 1 AS id, 'Adriana' AS first_name FROM dual
UNION ALL
SELECT 2 AS id, 'Ada' AS first_name FROM dual
UNION ALL
SELECT 3 AS id, 'Alice' AS first_name FROM dual
```

Script Output ×
| Task completed in 0,076 seconds

Table SA_CLIENTS.SA_T_CLIENT created.

5 rows inserted.


```
SELECT * FROM sa_clients.sa_t_client;
```

Script Output × | Query Result ×
SQL | All Rows Fetched: 5 in 0,036 seconds

	FIRST_NAME	LAST_NAME	PHONE	EMAIL	STREET	COUNTRY	CITY	CLIENT_STATUS
1	Adriana	Karnitskaya	375292307827	AdrianaKarnitskaya@mail.ru	Yesenin	Belarus	Minsk	Y
2	Ada	Alymova	375292026188	AdaAlymova@mail.ru	Nikolskaya	Russia	Moscow	Y
3	Alice	Lysenko	375291070713	AliceLysenko@mail.ru	Fifth Avenue	USA	New York	Y
4	Ian	Astafyev	375296165368	IanAstafyev@mail.ru	Champs Elysees	France	Paris	Y
5	Pavel	Moshko	375291476049	PavelMoshko@mail.ru	Antoine Dansaert	Belgium	Brussels	Y

4) Generate test data for the table sa_t_payment_method


```
INSERT INTO sa_restaurants.sa_t_payment_method
WITH CTE_FN AS (
SELECT 1 AS id, 'bank card' AS payment_method_name FROM dual
UNION ALL
SELECT 2 AS id, 'cash' AS payment_method_name FROM dual),
CTE_SN AS
(SELECT 1 AS id, 'Y' AS payment_method_status FROM dual
```

Script Output ×
| Task completed in 0,036 seconds

Table SA_RESTAURANTS.SA_T_PAYMENT_METHOD created.

2 rows inserted.


```
SELECT * FROM sa_restaurants.sa_t_payment_method;
```

Script Output × | Query Result ×
SQL | All Rows Fetched: 2 in 0,058 seconds

	PAYMENT_METHOD_NAME	PAYMENT_METHOD_STATUS
1	bank card	Y
2	cash	Y

5) Generate test data for the table sa_t_gen_period

```
SELECT * FROM sa_restaurants.sa_t_gen_period;
```

Script Output × | Query Result ×

SQL | All Rows Fetched: 5 in 0,04 seconds

	VALID_FROM	VALID_TO	PROMOTION_NAME	PROMOTION_PERCENT	DECRIPTION
1	01.01.22	20.01.22	promotion_name_1	25	decription_1
2	01.02.22	15.02.22	promotion_name_2	15	decription_2
3	01.03.22	10.03.22	promotion_name_3	10	decription_3
4	01.04.22	15.04.22	promotion_name_4	5	decription_4
5	01.05.22	25.05.22	promotion_name_5	20	decription_5

6) Generate test data for the table sa_t_employee

```
SELECT * FROM sa_restaurants.sa_t_employee;
```

Script Output × | Query Result ×

SQL | All Rows Fetched: 5 in 0,027 seconds

	FIRST_NAME	LAST_NAME	PHONE	EMAIL	DEPARTMENT	JOB_TITLE	STREET	COUNTRY	CITY	BUILDING	APARTMENT	EMPLOYEE_S
1	Vera	Lebedeva	375294112159	VeraLebedeva@mail.ru	department_name_5	job_title_2	G Galve	Lithuania	Vilnius	69	6	Y
2	Alexandra	Etkina	375299462652	AlexandraEtkina@mail.ru	department_name_1	job_title_3	Graben	Austria	Vienna	56	79	Y
3	Ivan	Semin	375294826271	IvanSemin@mail.ru	department_name_4	job_title_5	Via del Corso	Belgium	Brussels	97	223	Y
4	Ignat	Aksenov	375299429884	IgnatAksenov@mail.ru	department_name_5	job_title_5	Zybitskaya	Belarus	Brest	96	74	Y
5	Rita	Astafyeva	375297986921	RitaAstafyeva@mail.ru	(null)	(null)	(null)	(null)	(null)	75	279	Y

7) Generate test data for the table sa_t_transaction

```
SELECT * FROM sa_orders.sa_t_transaction;
```

Script Output × | Query Result ×

SQL | Fetched 50 rows in 0,048 seconds

	FIRST_NAME_C	LAST_NAME_C	PHONE_C	EMAIL_C	STREET_C	COUNTRY_C	CITY_C	CLIENT_STATUS	DISH_NAME	DISH_CATEGORY	PRICE
1	Ian	Astafyev	375296165368	IanAstafyev@mail.ru	Champs Elysees	France	Paris	Y	pasta	hot	89 pa
2	Ian	Astafyev	375296165368	IanAstafyev@mail.ru	Champs Elysees	France	Paris	Y	soup	hot	18 so
3	Ian	Astafyev	375296165368	IanAstafyev@mail.ru	Champs Elysees	France	Paris	Y	pizza	hot	69 pi
4	Ian	Astafyev	375296165368	IanAstafyev@mail.ru	Champs Elysees	France	Paris	Y	greek salad	appetizer	86 gr
5	Pavel	Moshko	375291476049	PavelMoshko@mail.ru	Antoine Dansaert	Belgium	Brussels	Y	chebupelli	hot	13 ch
6	Pavel	Moshko	375291476049	PavelMoshko@mail.ru	Antoine Dansaert	Belgium	Brussels	Y	pasta	hot	89 pa
7	Pavel	Moshko	375291476049	PavelMoshko@mail.ru	Antoine Dansaert	Belgium	Brussels	Y	soup	hot	18 so
8	Pavel	Moshko	375291476049	PavelMoshko@mail.ru	Antoine Dansaert	Belgium	Brussels	Y	pizza	hot	69 pi
9	Pavel	Moshko	375291476049	PavelMoshko@mail.ru	Antoine Dansaert	Belgium	Brussels	Y	greek salad	appetizer	86 gr
10	Adriana	Karnitskaya	375292307827	AdrianaKarnitskaya@mail.ru	Yesenin	Belarus	Minsk	Y	chebupelli	hot	13 ch
11	Adriana	Karnitskaya	375292307827	AdrianaKarnitskaya@mail.ru	Yesenin	Belarus	Minsk	Y	pasta	hot	89 pa
12	Adriana	Karnitskaya	375292307827	AdrianaKarnitskaya@mail.ru	Yesenin	Belarus	Minsk	Y	soup	hot	18 so
13	Adriana	Karnitskaya	375292307827	AdrianaKarnitskaya@mail.ru	Yesenin	Belarus	Minsk	Y	pizza	hot	69 pi

Task 3 - Create Group by Plan

```
SELECT trunc(order_date, 'MM'),SUM(total_cost) FROM sa_orders.sa_t_transaction
GROUP BY trunc(order_date, 'MM');
```

Script Output × | Query Result ×

SQL | All Rows Fetched: 12 in 0,149 seconds

	TRUNC(ORDER_DATE,'MM')	SUM(TOTAL_COST)
1	01.01.21	29197265
2	01.02.21	26354553
3	01.03.21	29083715
4	01.04.21	28120665
5	01.05.21	29087063
6	01.06.21	28253245
7	01.07.21	29316375
8	01.08.21	29048233
9	01.09.21	28043813
10	01.10.21	29147342
11	01.11.21	28202780
12	01.12.21	29222714