

Министерство образования Республики Беларусь

Учреждение образования  
БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ  
ИНФОРМАТИКИ И РАДИОЭЛЕКТРОНИКИ

Факультет компьютерных систем и сетей

Кафедра электронных вычислительных машин

Дисциплина: Базы данных

ОТЧЕТ  
по лабораторной работе № 3  
на тему  
РЕАЛИЗАЦИЯ SQL-ЗАПРОСОВ ДЛЯ СОЗДАНИЯ СХЕМЫ БАЗЫ  
ДАННЫХ,  
ВАРИАНТ № 29 – Туристическое агентство

Студент:

В.И. Кириллов

Проверила:

Д.В. Куприянова

Дата:

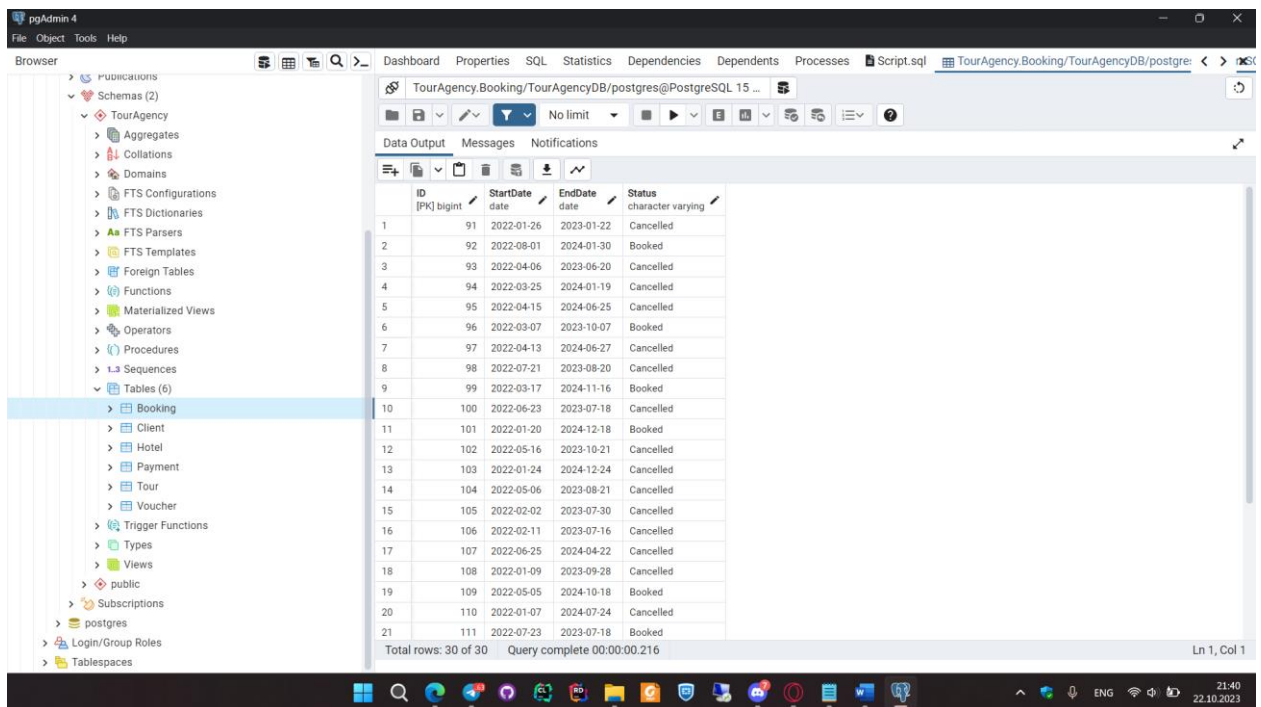
22.10.2023

МИНСК 2023

## 1. Заполнение таблиц вручную

Чтобы добавлять строки в pgAdmin вручную, нужно щелкнуть правой кнопкой мыши по таблице, куда мы хотим добавить строки, в контекстном меню выбрать «View/Edit Data», затем «All Rows», откроется окно с данными таблицы. Далее на вкладке «Data Output» нужно нажать кнопку «Add Row», это добавит в таблицу пустую строку. Далее эту строку можно заполнить по своему усмотрению. Чтобы сохранить изменения, нужно нажать кнопку «Save Data Changes».

Таблицы, заполненные вручную, представлены на рисунках 1.1-1.6.



ID [PK] bigint	startDate date	endDate date	Status character varying
1	2022-01-26	2023-01-22	Cancelled
2	2022-08-01	2024-01-30	Booked
3	2022-04-06	2023-06-20	Cancelled
4	2022-03-25	2024-01-19	Cancelled
5	2022-04-15	2024-06-25	Cancelled
6	2022-03-07	2023-10-07	Booked
7	2022-04-13	2024-06-27	Cancelled
8	2022-07-21	2023-08-20	Cancelled
9	2022-03-17	2024-11-16	Booked
10	2022-06-23	2023-07-18	Cancelled
11	2022-01-20	2024-12-18	Booked
12	2022-05-16	2023-10-21	Cancelled
13	2022-01-24	2024-12-24	Cancelled
14	2022-05-06	2023-08-21	Cancelled
15	2022-02-02	2023-07-30	Cancelled
16	2022-02-11	2023-07-16	Cancelled
17	2022-06-25	2024-04-22	Cancelled
18	2022-01-09	2023-09-28	Cancelled
19	2022-05-05	2024-10-18	Booked
20	2022-01-07	2024-07-24	Cancelled
21	2022-07-23	2023-07-18	Booked

Рисунок 1.1 – Таблица «Booking» строки 1-21

pgAdmin 4

File Object Tools Help

Browser

- Publications
- Schemas (2)
  - TourAgency
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (6)
      - Booking
      - Client
      - Hotel
      - Payment
      - Tour
      - Voucher
    - Trigger Functions
    - Types
    - Views
  - public
  - Subscriptions
  - postgres
  - Login/Group Roles
  - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents Processes Script.sql TourAgency.Booking/TourAgencyDB/postgres@PostgreSQL 15 ...

TourAgency.Booking/TourAgencyDB/postgres@PostgreSQL 15 ...

Data Output Messages Notifications

ID	PK	bigint	StartDate	date	EndDate	date	Status	character varying
10		100	2022-06-23		2023-07-18		Cancelled	
11		101	2022-01-20		2024-12-18		Booked	
12		102	2022-05-16		2023-10-21		Cancelled	
13		103	2022-01-24		2024-12-24		Cancelled	
14		104	2022-05-06		2023-08-21		Cancelled	
15		105	2022-02-02		2023-07-30		Cancelled	
16		106	2022-02-11		2023-07-16		Cancelled	
17		107	2022-06-25		2024-04-22		Cancelled	
18		108	2022-01-09		2023-09-28		Cancelled	
19		109	2022-05-05		2024-10-18		Booked	
20		110	2022-01-07		2024-07-24		Cancelled	
21		111	2022-07-23		2023-07-18		Booked	
22		112	2022-07-14		2023-05-17		Booked	
23		113	2022-05-11		2024-07-12		Cancelled	
24		114	2022-01-06		2024-07-01		Cancelled	
25		115	2022-07-03		2024-11-07		Cancelled	
26		116	2022-05-30		2023-06-11		Booked	
27		117	2022-06-23		2023-02-14		Cancelled	
28		118	2022-05-21		2024-05-07		Booked	
29		119	2022-05-23		2024-12-23		Cancelled	
30		120	2022-04-09		2024-12-25		Booked	

Total rows: 30 of 30 Query complete 00:00:00.216 Ln 1, Col 1

Рисунок 1.2 – Таблица «Booking» строки 22-30

pgAdmin 4

File Object Tools Help

Browser

- Publications
- Schemas (2)
  - TourAgency
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (6)
      - Booking
      - Client
      - Hotel
      - Payment
      - Tour
      - Voucher
    - Trigger Functions
    - Types
    - Views
  - public
  - Subscriptions
  - postgres
  - Login/Group Roles
  - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents Processes Script.sql TourAgency.Booking/TourAgencyDB/postgres@PostgreSQL 15 ...

TourAgency.Client/TourAgencyDB/postgres@PostgreSQL 15 (6...)

Data Output Messages Notifications

ID	PK	bigint	FirstName	character varying	SecondName	character varying	ThirdName	character varying	PhoneNumber	character varying
1		94	Alexey		Nikolaevich		Popov		+74653081	
2		95	Ivan		Olegovich		Petrov		+71145282	
3		96	Ivan		Vladimirovich		Petrov		+71024843	
4		97	Ivan		Sergeevich		Sidorov		+73141234	
5		98	Dmitry		Olegovich		Popov		+79101041	
6		99	Dmitry		Ivanovich		Sminov		+77239081	
7		100	Ivan		Andreevich		Petrov		+72087913	
8		101	Dmitry		Olegovich		Ivanov		+71757706	
9		102	Ivan		Anatolevich		Ivanov		+74862098	
10		103	Alexey		Anatolevich		Popov		+78461441	
11		104	Sergey		Ivanovich		Kuznetsov		+7237989	
12		105	Ivan		Ivanovich		Kuznetsov		+7338666	
13		106	Sergey		Petrovich		Popov		+72867308	
14		107	Sergey		Vladimirovich		Volkov		+73407754	
15		108	Vladimir		Petrovich		Mikhailov		+75849404	
16		109	Ivan		Ivanovich		Sminov		+7817355	
17		110	Sergey		Anatolevich		Sminov		+77037150	
18		111	Vladimir		Vladimirovich		Morozov		+72104390	
19		112	Dmitry		Andreevich		Sminov		+79604431	
20		113	Dmitry		Petrovich		Mikhailov		+73287181	
21		114	Ivan		Petrovich		Volkov		+7143496	

Total rows: 30 of 30 Query complete 00:00:00.120 Ln 1, Col 1

Рисунок 1.3 – Таблица «Client» строки 1-21

pgAdmin 4

File Object Tools Help

Browser

- Publications
- Schemas (2)
  - TourAgency
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (6)
      - Booking
      - Client
      - Hotel
      - Payment
      - Tour
      - Voucher
    - Trigger Functions
    - Types
    - Views
  - public
  - Subscriptions
  - postgres
  - Login/Group Roles
  - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents Processes Script.sql TourAgency.Bo... TourAgency.Cli...

TourAgency.Client/TourAgencyDB/postgres@PostgreSQL 15 (6...)

Data Output Messages Notifications

ID [PK] bigint	FirstName character varying	SecondName character varying	ThirdName character varying	PhoneNumber character varying
10	Alexey	Anatolevich	Popov	+78461441
11	Sergey	Ivanovich	Kuznetsov	+7227989
12	Ivan	Ivanovich	Kuznetsov	+7338666
13	Sergey	Petrovich	Popov	+72867308
14	Sergey	Vladimirovich	Volkov	+73407754
15	Vladimir	Petrovich	Mikhailov	+75849404
16	Ivan	Ivanovich	Sminov	+7817355
17	Sergey	Anatolevich	Sminov	+77037150
18	Vladimir	Vladimirovich	Morozov	+72104390
19	Dmitry	Andreevich	Sminov	+79604431
20	Dmitry	Petrovich	Mikhailov	+73287181
21	Ivan	Petrovich	Volkov	+7143496
22	Vladimir	Andreevich	Novikov	+72496170
23	Ivan	Anatolevich	Novikov	+72148137
24	Alexey	Andreevich	Petrov	+76927010
25	Sergey	Vladimirovich	Novikov	+73715488
26	Ivan	Vladimirovich	Popov	+79570855
27	Alexey	Dmitrievich	Morozov	+71649623
28	Sergey	Sergeevich	Ivanov	+73122728
29	Dmitry	Nikolaevich	Sminov	+77370569
30	Sergey	Petrovich	Sminov	+78507172

Total rows: 30 of 30 Query complete 00:00:00.120 Ln 1, Col 1

Рисунок 1.4 – Таблица «Client» строки 22-30

pgAdmin 4

File Object Tools Help

Browser

- Publications
- Schemas (2)
  - TourAgency
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (6)
      - Booking
      - Client
      - Hotel
      - Payment
      - Tour
      - Voucher
    - Trigger Functions
    - Types
    - Views
  - public
  - Subscriptions
  - postgres
  - Login/Group Roles
  - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents Processes Script.sql TourAgency.Bo... TourAgency.Cli...

TourAgency.Hotel/TourAgencyDB/postgres@PostgreSQL 15 (64...)

Data Output Messages Notifications

ID [PK] bigint	Cost money	Name character varying	Address character varying
1	45 147,00 ?	Ritz-Carlton	Address 582, City
2	16 481,00 ?	Holiday Inn	Address 972, City
3	27 472,00 ?	InterContinental	Address 473, City
4	65 932,00 ?	Ritz-Carlton	Address 244, City
5	52 545,00 ?	Sheraton	Address 223, City
6	77 008,00 ?	InterContinental	Address 483, City
7	58 963,00 ?	Hyatt	Address 788, City
8	2 188,00 ?	Holiday Inn	Address 178, City
9	68 368,00 ?	InterContinental	Address 711, City
10	58 242,00 ?	Four Seasons	Address 484, City
11	42 215,00 ?	Four Seasons	Address 613, City
12	76 665,00 ?	Holiday Inn	Address 114, City
13	43 596,00 ?	Marriott	Address 154, City
14	49 366,00 ?	Sheraton	Address 588, City
15	55 418,00 ?	Marriott	Address 728, City
16	57 215,00 ?	Hyatt	Address 111, City
17	67 911,00 ?	Holiday Inn	Address 827, City
18	30 761,00 ?	Westin	Address 914, City
19	95 030,00 ?	InterContinental	Address 804, City
20	99 502,00 ?	Marriott	Address 551, City
21	28 997,00 ?	Sheraton	Address 234, City

Total rows: 30 of 30 Query complete 00:00:00.087 Ln 1, Col 1

Рисунок 1.5 – Таблица «Hotel» строки 1-21

ID [PK] bigint	Cost money	Name character varying	Address character varying
10	40 58 242,00 ?	Four Seasons	Address 484, City
11	41 42 215,00 ?	Four Seasons	Address 613, City
12	42 76 665,00 ?	Holiday Inn	Address 114, City
13	43 43 596,00 ?	Marriott	Address 154, City
14	44 49 366,00 ?	Sheraton	Address 588, City
15	45 55 418,00 ?	Marriott	Address 728, City
16	46 57 215,00 ?	Hyatt	Address 111, City
17	47 67 911,00 ?	Holiday Inn	Address 827, City
18	48 30 761,00 ?	Westin	Address 914, City
19	49 95 030,00 ?	InterContinental	Address 804, City
20	50 99 502,00 ?	Marriott	Address 551, City
21	51 28 997,00 ?	Sheraton	Address 234, City
22	52 89 533,00 ?	Hyatt	Address 41, City
23	53 64 660,00 ?	InterContinental	Address 580, City
24	54 6 159,00 ?	Hyatt	Address 608, City
25	55 72 976,00 ?	Westin	Address 555, City
26	56 28 091,00 ?	Ritz-Carlton	Address 985, City
27	57 40 508,00 ?	Marriott	Address 942, City
28	58 5 980,00 ?	Westin	Address 28, City
29	59 85 718,00 ?	Four Seasons	Address 741, City
30	60 25 328,00 ?	Ritz-Carlton	Address 401, City

Рисунок 1.6 – Таблица «Hotel» строки 22-30

## 2. Заполнение таблиц скриптами

Чтобы заполнить таблицу с помощью скрипта, нужно щелкнуть правой кнопкой мыши по таблице, выбрать в контекстном окне «Query Tool». В появившемся окне во вкладке «Query» ввести скрипт и нажать кнопку «Execute/Refresh».

Таблицы, заполненные скриптами, представлены на рисунках 2.1-2.6.

pgAdmin 4

File Object Tools Help

Browser

- Publications
- Schemas (2)
  - TourAgency
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (6)
      - Booking
      - Client
      - Hotel
      - Payment
      - Tour
      - Voucher
    - Trigger Functions
    - Types
    - Views
  - public
  - Subscriptions
  - postgres
  - Login/Group Roles
  - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents Processes Script.sql TourAgency.Bo... TourAgency.Cli...

TourAgency.Payment/TourAgencyDB/postgres@PostgreSQL 15...

Data Output Messages Notifications

ID [PK]	bigint	Date date	Amount money	Discount smallint
1	31	2022-07-08	86 385,00 ?	36
2	32	2023-11-05	97 119,00 ?	12
3	33	2023-08-01	5 990,00 ?	54
4	34	2022-09-04	82 203,00 ?	57
5	35	2022-02-20	88 595,00 ?	34
6	36	2022-04-19	53 402,00 ?	41
7	37	2022-10-04	91 028,00 ?	32
8	38	2022-03-07	66 543,00 ?	7
9	39	2022-12-19	47 470,00 ?	23
10	40	2023-06-25	68 286,00 ?	7
11	41	2022-04-26	57 684,00 ?	53
12	42	2023-10-19	24 447,00 ?	21
13	43	2023-08-07	46 739,00 ?	42
14	44	2022-09-07	32 939,00 ?	66
15	45	2022-12-13	47 506,00 ?	51
16	46	2022-07-10	29 484,00 ?	47
17	47	2023-10-25	74 237,00 ?	13
18	48	2022-05-23	69 997,00 ?	24
19	49	2022-10-21	83 133,00 ?	11
20	50	2023-01-10	8 193,00 ?	28
21	51	2022-10-02	88 867,00 ?	43

Total rows: 30 of 30 Query complete 00:00:00.096 Ln 1, Col 1

Рисунок 2.1 – Таблица «Payment» строки 1-21

pgAdmin 4

File Object Tools Help

Browser

- Publications
- Schemas (2)
  - TourAgency
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (6)
      - Booking
      - Client
      - Hotel
      - Payment
      - Tour
      - Voucher
    - Trigger Functions
    - Types
    - Views
  - public
  - Subscriptions
  - postgres
  - Login/Group Roles
  - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents Processes Script.sql TourAgency.Bo... TourAgency.Cli...

TourAgency.Payment/TourAgencyDB/postgres@PostgreSQL 15...

Data Output Messages Notifications

ID [PK]	bigint	Date date	Amount money	Discount smallint
10	40	2023-06-25	68 286,00 ?	7
11	41	2022-04-26	57 684,00 ?	53
12	42	2023-10-19	24 447,00 ?	21
13	43	2023-08-07	46 739,00 ?	42
14	44	2022-09-07	32 939,00 ?	66
15	45	2022-12-13	47 506,00 ?	51
16	46	2022-07-10	29 484,00 ?	47
17	47	2023-10-25	74 237,00 ?	13
18	48	2022-05-23	69 997,00 ?	24
19	49	2022-10-21	83 133,00 ?	11
20	50	2023-01-10	8 193,00 ?	28
21	51	2022-10-02	88 867,00 ?	43
22	52	2022-11-03	7 673,00 ?	69
23	53	2022-05-28	54 739,00 ?	38
24	54	2022-07-21	21 228,00 ?	41
25	55	2023-12-07	74 401,00 ?	3
26	56	2023-07-07	90 958,00 ?	25
27	57	2022-05-25	84 121,00 ?	59
28	58	2023-02-02	68 944,00 ?	57
29	59	2023-01-19	33 608,00 ?	17
30	60	2022-02-19	11 359,00 ?	3

Total rows: 30 of 30 Query complete 00:00:00.096 Ln 1, Col 1

Рисунок 2.2 – Таблица «Payment» строки 22-30

The screenshot displays the pgAdmin 4 interface. On the left, the 'Browser' pane shows the 'TourAgency' database structure, with the 'Tables (6)' folder expanded to show the 'Tour' table selected. The main pane shows the 'Data Output' tab for the 'TourAgency.Tour' table. The table has 7 columns: ID (PK), bigint, Days, smallint, Name, character varying, and Type, character varying. The data is displayed in a grid with 30 rows. The first 21 rows are visible, showing tour packages with IDs 1 through 21. The last row is partially visible, showing ID 21.

ID	[PK] bigint	Days	smallint	Name	character varying	Type	character varying
1	61	25	Canada	Non-hot			
2	62	21	Belarus	Hot			
3	63	26	Poland	Non-hot			
4	64	47	Belarus	Hot			
5	65	49	Canada	Hot			
6	66	2	Poland	Non-hot			
7	67	56	Poland	Non-hot			
8	68	37	Canada	Non-hot			
9	69	32	Poland	Hot			
10	70	15	Canada	Non-hot			
11	71	26	Belarus	Hot			
12	72	36	Russia	Hot			
13	73	54	USA	Non-hot			
14	74	40	USA	Non-hot			
15	75	16	USA	Hot			
16	76	42	USA	Non-hot			
17	77	20	Belarus	Hot			
18	78	18	Belarus	Non-hot			
19	79	30	Poland	Non-hot			
20	80	34	Russia	Non-hot			
21	81	55	Russia	Hot			

Total rows: 30 of 30 Query complete 00:00:00.147 Ln 1, Col 1

Рисунок 2.3 – Таблица «Tour» строки 1-21

The screenshot displays the pgAdmin 4 interface. On the left, the 'Browser' pane shows the 'TourAgency' database structure, with 'Tables (6)' expanded and 'Tour' selected. The main pane shows the 'Data Output' for the 'Tour' table. The table has 7 columns: ID (PK), bigint, Days, smallint, Name, character varying, and Type, character varying. The data is sorted by ID in ascending order. The first 10 rows are not visible, and the last 10 rows are also not visible. The status bar at the bottom indicates 'Total rows: 30 of 30' and 'Query complete 00:00:00.147'.

ID	[PK] bigint	Days	smallint	Name	character varying	Type	character varying
10	70	15	Canada	Non-hot			
11	71	26	Belarus	Hot			
12	72	36	Russia	Hot			
13	73	54	USA	Non-hot			
14	74	40	USA	Non-hot			
15	75	16	USA	Hot			
16	76	42	USA	Non-hot			
17	77	20	Belarus	Hot			
18	78	18	Belarus	Non-hot			
19	79	30	Poland	Non-hot			
20	80	34	Russia	Non-hot			
21	81	55	Russia	Hot			
22	82	23	Canada	Hot			
23	83	25	Russia	Hot			
24	84	45	Belarus	Hot			
25	85	54	Belarus	Non-hot			
26	86	8	Canada	Non-hot			
27	87	25	Russia	Hot			
28	88	34	Belarus	Non-hot			
29	89	57	Canada	Hot			
30	90	41	Poland	Hot			

Рисунок 2.4 – Таблица «Tour» строки 22-30



pgAdmin 4

File Object Tools Help

Browser

- Publications
- Schemas (2)
  - TourAgency
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (6)
      - Booking
      - Client
      - Hotel
      - Payment
      - Tour
      - Voucher
    - Trigger Functions
    - Types
    - Views
  - public
  - Subscriptions
  - postgres
  - Login/Group Roles
  - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents Processes Script.sql TourAgency.Bo... TourAgency.Cli...

TourAgency.Voucher/TourAgencyDB/postgres@PostgreSQL 15 ...

Data Output Messages Notifications

ID [PK] bigint	StartDate date	EndDate date	Status character varying
1	2022-04-09	2023-02-04	Cancelled
2	2022-07-06	2024-10-12	Booked
3	2022-04-17	2023-11-30	Cancelled
4	2022-07-18	2024-10-06	Cancelled
5	2022-07-02	2023-06-27	Booked
6	2022-06-22	2024-05-25	Cancelled
7	2022-07-05	2023-06-20	Booked
8	2022-04-25	2023-11-01	Cancelled
9	2022-03-23	2024-11-19	Cancelled
10	2022-03-31	2024-11-02	Cancelled
11	2022-05-09	2024-05-07	Cancelled
12	2022-01-12	2023-06-10	Booked
13	2022-05-09	2024-10-11	Booked
14	2022-03-08	2024-05-30	Cancelled
15	2022-03-25	2024-09-07	Cancelled
16	2022-05-29	2023-11-09	Booked
17	2022-03-29	2023-02-22	Cancelled
18	2022-02-11	2024-01-05	Cancelled
19	2022-05-24	2024-08-29	Booked
20	2022-07-29	2024-02-07	Cancelled
21	2022-04-13	2023-01-18	Booked

Total rows: 30 of 30 Query complete 00:00:00.089 Ln 1, Col 1

Рисунок 2.5 – Таблица «Voucher» строки 1-21

pgAdmin 4

File Object Tools Help

Browser

- Publications
- Schemas (2)
  - TourAgency
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (6)
      - Booking
      - Client
      - Hotel
      - Payment
      - Tour
      - Voucher
    - Trigger Functions
    - Types
    - Views
  - public
  - Subscriptions
  - postgres
  - Login/Group Roles
  - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents Processes Script.sql TourAgency.Bo... TourAgency.Cli...

TourAgency.Voucher/TourAgencyDB/postgres@PostgreSQL 15 ...

Data Output Messages Notifications

ID [PK] bigint	StartDate date	EndDate date	Status character varying
10	2022-03-31	2024-11-02	Cancelled
11	2022-05-09	2024-05-07	Cancelled
12	2022-01-12	2023-06-10	Booked
13	2022-05-09	2024-10-11	Booked
14	2022-03-08	2024-05-30	Cancelled
15	2022-03-25	2024-09-07	Cancelled
16	2022-05-29	2023-11-09	Booked
17	2022-03-29	2023-02-22	Cancelled
18	2022-02-11	2024-01-05	Cancelled
19	2022-05-24	2024-08-29	Booked
20	2022-07-29	2024-02-07	Cancelled
21	2022-04-13	2023-01-18	Booked
22	2022-01-10	2024-11-24	Cancelled
23	2022-06-05	2024-05-22	Cancelled
24	2022-06-26	2023-11-07	Booked
25	2022-06-07	2023-03-14	Cancelled
26	2022-02-21	2024-03-25	Booked
27	2022-03-07	2023-08-24	Booked
28	2022-04-17	2023-09-06	Cancelled
29	2022-07-27	2024-09-03	Booked
30	2022-03-01	2023-03-05	Cancelled

Total rows: 30 of 30 Query complete 00:00:00.089 Ln 1, Col 1

Рисунок 2.6 – Таблица «Voucher» строки 22-30



### 3. Скрипты

#### Скрипт заполнения таблицы «Payment»:

```
INSERT INTO "TourAgency"."Payment" ("Date", "Amount",
"Discount")
SELECT
    DATE '2022-01-01' + CAST(random() * (DATE '2023-12-31' -
DATE '2022-01-01') AS INTEGER) AS Date,
    (CAST(floor(random()*100000) AS INTEGER)) AS Amount,
    (CAST(floor(random()*70) AS SMALLINT)) AS Discount
FROM generate_series(1, 30);
```

#### Скрипт заполнения таблицы «Tour»:

```
INSERT INTO "TourAgency"."Tour" ("Days", "Name", "Type")
SELECT
    (CAST(floor(random()*60) AS SMALLINT)) AS Days,
    ((array['Russia', 'Belarus', 'USA', 'Canada',
'Poland'])[floor(random()*5)+1]) AS Name,
    ((array['Hot', 'Non-hot'])[floor(random()*2)+1]) AS Type
FROM generate_series(1, 30);
```

#### Скрипт заполнения таблицы «Voucher»:

```
INSERT INTO "TourAgency"."Voucher" ("StartDate", "EndDate",
"Status")
SELECT
    DATE '2022-01-01' + CAST(random() * (DATE '2023-12-31' -
DATE '2023-06-01') AS INTEGER) AS StartDate,
    DATE '2023-01-01' + CAST(random() * (DATE '2023-12-31' -
DATE '2022-01-01') AS INTEGER) AS EndDate,
    CASE
        WHEN random() < 0.5 THEN 'Booked'
        ELSE 'Cancelled'
    END AS Status
FROM generate_series(1, 30);
```