

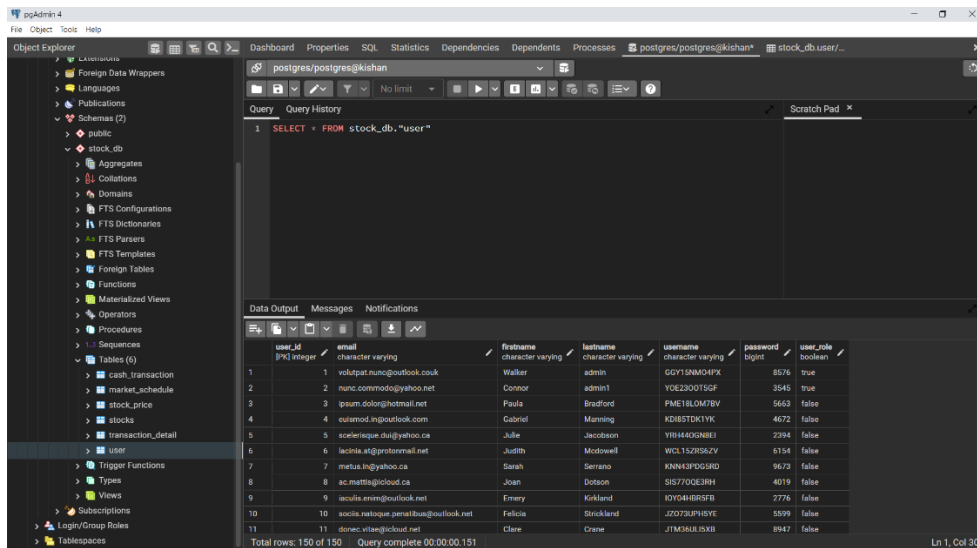
Lab – 1.1 DBMS (Stock management system)

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Student ID – 202312014

1)

SELECT * FROM stock_db."user"



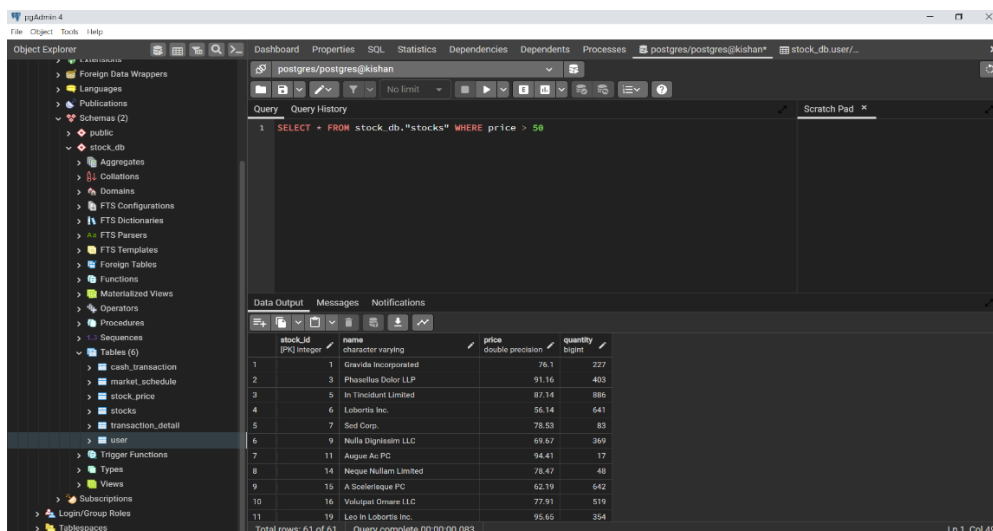
The screenshot shows the pgAdmin 4 interface with a query executed: `SELECT * FROM stock_db.\"user\"`. The result set displays 15 rows of user data. The columns are: user_id (integer), email (character varying), first_name (character varying), last_name (character varying), username (character varying), password (bigint), and user_role (boolean).

user_id	email	first_name	last_name	username	password	user_role
1	volutpat.nunc@outlook.co.uk	Walker	admin	GGY15NM04FX	8576	true
2	nunc.commodo@yahoo.net	Connor	admin1	YOEZ300T5GF	3545	true
3	ipsum.dolor@hotmail.net	Paula	Bradford	FME18LOM7BV	5663	false
4	euiamod.in@outlook.com	Gabriel	Manning	KD85TDK1YK	4672	false
5	scelerisque.dui@yahoo.ca	Julie	Jacobson	YR44OGN8E3	2394	false
6	lectus.at@protonmail.net	Judith	McDowell	WCL15Z8S6ZY	6154	false
7	metus.in@yahoo.ca	Sarah	Serrano	KNN43PDGSRD	9673	false
8	ac.mattis@icloud.ca	Joan	Dobson	SIS77QCE3RH	4019	false
9	iaculis.enim@outlook.net	Emery	Kirkland	IOY04H8R5F8	2776	false
10	sociis.risusque.pene@outlook.net	Felice	Stockland	J0073UPV8YK	5599	false
11	dones.vitae@icloud.net	Clare	Craie	JTM36L8X8B	8947	false

Tuples -> 150

2)

SELECT * FROM stock_db."stocks" WHERE PRICE = 50



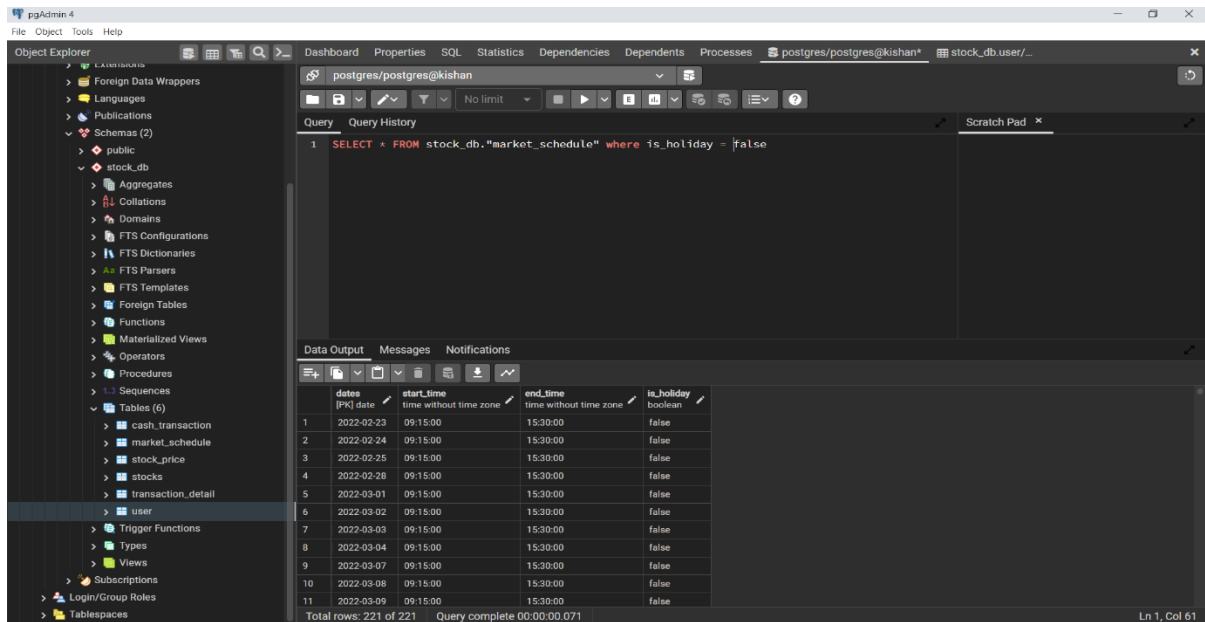
The screenshot shows the pgAdmin 4 interface with a query executed: `SELECT * FROM stock_db.\"stocks\" WHERE PRICE = 50`. The result set displays 11 rows of stock data. The columns are: stock_id (integer), name (character varying), price (double precision), and quantity (bigint).

stock_id	name	price	quantity
1	Gravida Incorporated	76.1	227
2	Phasellus Dolor LLP	91.16	403
3	In Trincidunt Limited	87.14	886
4	Libortis Inc.	56.14	641
5	Sed Corp.	75.53	83
6	Nulla Dignissim LLC	69.87	369
7	Augue Ac PO	94.43	17
8	Neque Nullam Limited	78.47	48
9	A Scelerisque PC	62.19	642
10	Volutpat Omare LLC	77.91	519
11	Leo In Libortis Inc.	95.66	354

Tuples -> 61

3)

SELECT * FROM stock_db."market_schedule" WHERE is_holiday = false;



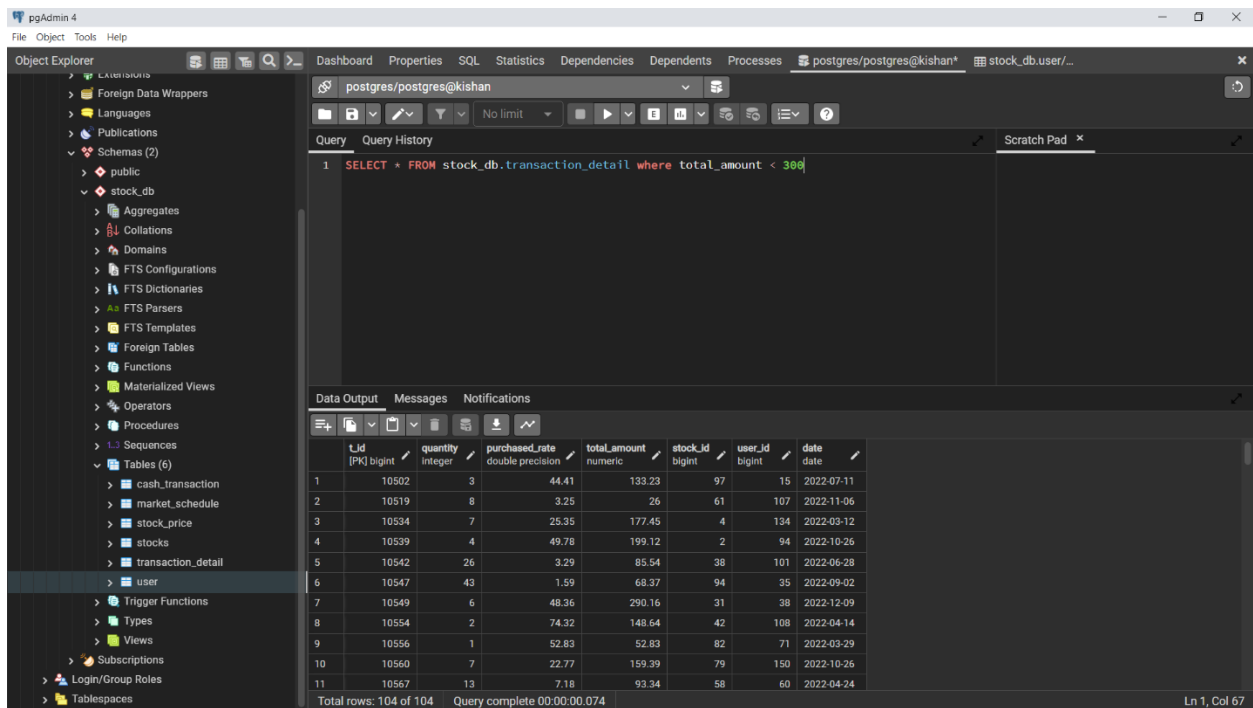
The screenshot shows the pgAdmin 4 interface. The left pane displays the database structure, including the 'stock_db' schema and its tables. The main pane shows a query: `SELECT * FROM stock_db."market_schedule" where is_holiday = false;`. The 'Data Output' pane displays the results of the query, showing 11 rows of data. The status bar at the bottom indicates 'Total rows: 221 of 221' and 'Query complete 00:00:00.071'.

	dates [PK] date	start_time time without time zone	end_time time without time zone	is_holiday boolean
1	2022-02-23	09:15:00	15:30:00	false
2	2022-02-24	09:15:00	15:30:00	false
3	2022-02-25	09:15:00	15:30:00	false
4	2022-02-26	09:15:00	15:30:00	false
5	2022-03-01	09:15:00	15:30:00	false
6	2022-03-02	09:15:00	15:30:00	false
7	2022-03-03	09:15:00	15:30:00	false
8	2022-03-04	09:15:00	15:30:00	false
9	2022-03-07	09:15:00	15:30:00	false
10	2022-03-08	09:15:00	15:30:00	false
11	2022-03-09	09:15:00	15:30:00	false

Tuples -> 221

4)

SELECT * FROM stock_db."transaction_detail" where total_amount < 300



The screenshot shows the pgAdmin 4 interface. The left pane displays the database structure, including the 'stock_db' schema and its tables. The main pane shows a query: `SELECT * FROM stock_db.transaction_detail where total_amount < 300;`. The 'Data Output' pane displays the results of the query, showing 11 rows of data. The status bar at the bottom indicates 'Total rows: 104 of 104' and 'Query complete 00:00:00.074'.

	t_id [PK] bigint	quantity integer	purchased_rate double precision	totalAmount numeric	stock_id bigint	user_id bigint	date date
1	10502	3	44.41	133.23	97	15	2022-07-11
2	10519	8	3.25	26	61	107	2022-11-06
3	10534	7	25.35	177.45	4	134	2022-03-12
4	10539	4	49.78	199.12	2	94	2022-10-26
5	10542	26	3.29	85.54	38	101	2022-06-28
6	10547	43	1.59	68.37	94	35	2022-09-02
7	10549	6	48.36	290.16	31	38	2022-12-09
8	10554	2	74.32	148.64	42	108	2022-04-14
9	10556	1	52.83	52.83	82	71	2022-03-29
10	10560	7	22.77	159.39	79	150	2022-10-26
11	10567	13	7.18	93.34	58	60	2022-04-24

Tuples -> 104

5)

SELECT AVG(price) FROM stock_db."stock_price"

A screenshot of the pgAdmin 4 interface. The left sidebar shows the 'Object Explorer' with the 'stock_db' database selected, and the 'stock_price' table highlighted under the 'Tables (6)' category. The main query editor window shows the query: `SELECT AVG(price) FROM stock_db."stock_price"`. The 'Data Output' pane at the bottom displays the result: a single row with the value 54.0937. The status bar at the bottom indicates 'Total rows: 1 of 1' and 'Query complete 00:00:00.047'.

avg
54.0937

Tuples -> 1

6)

SELECT max(price) FROM stock_db."stock_price"

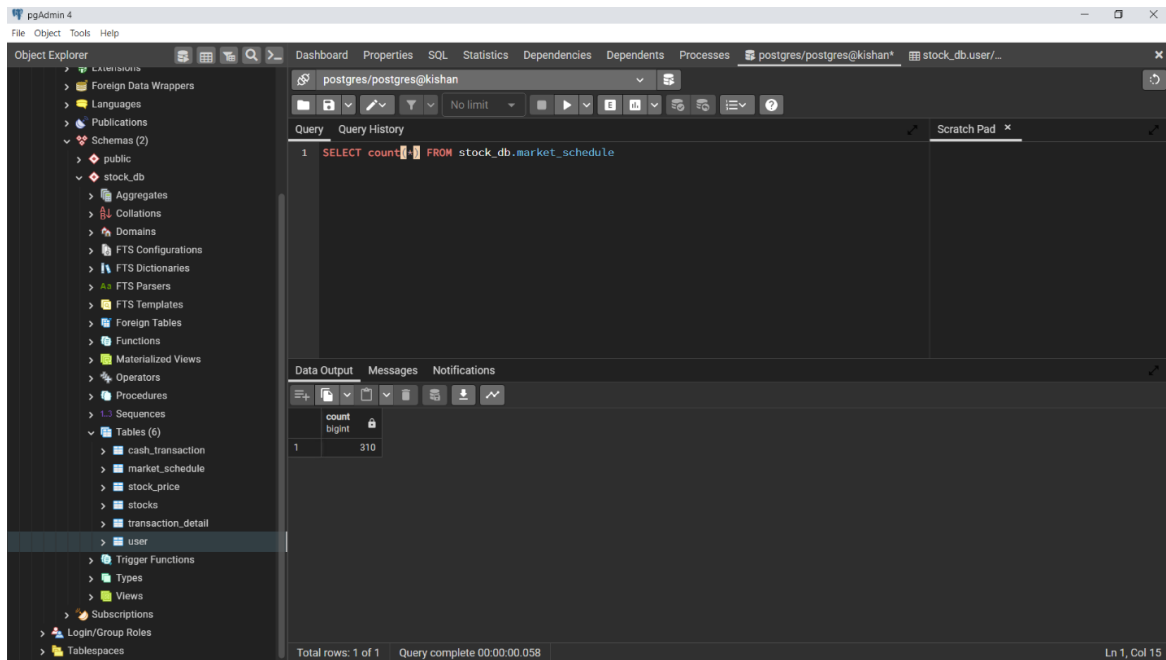
A screenshot of the pgAdmin 4 interface. The left sidebar shows the 'Object Explorer' with the 'stock_db' database selected, and the 'stock_price' table highlighted under the 'Tables (6)' category. The main query editor window shows the query: `SELECT max(price) FROM stock_db."stock_price"`. The 'Data Output' pane at the bottom displays the result: a single row with the value 99.28. The status bar at the bottom indicates 'Total rows: 1 of 1' and 'Query complete 00:00:00.115'.

max
99.28

Tuples -> 1

7)

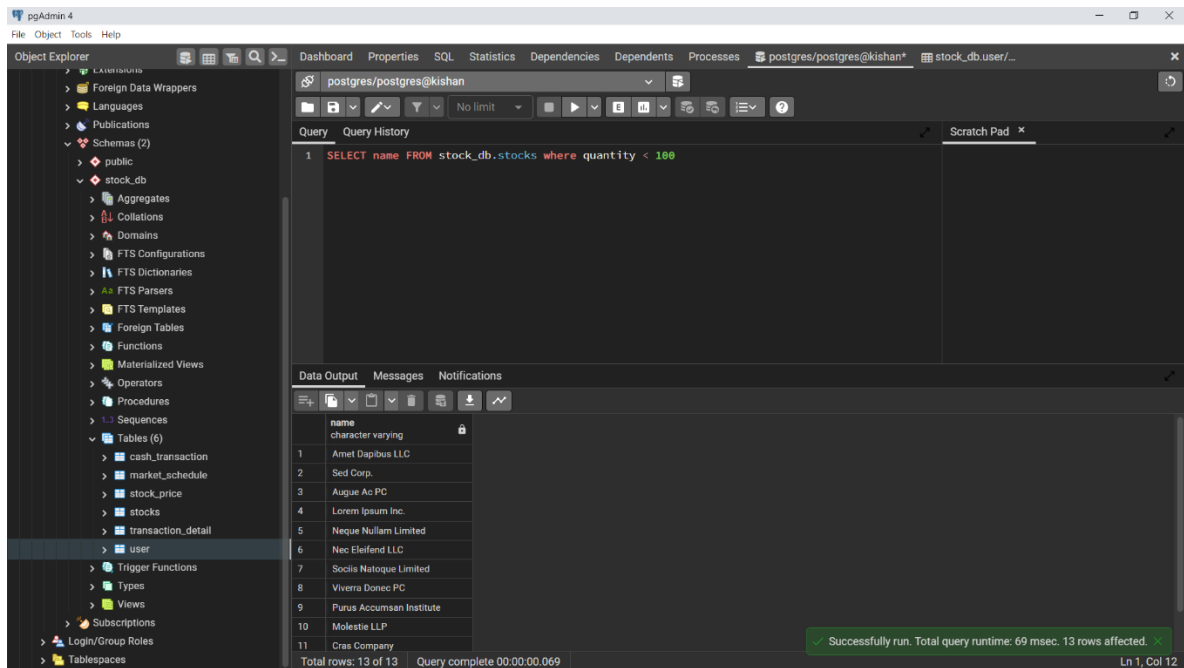
SELECT count(*) FROM stock_db."market_schedule"



Tuples -> 1

8)

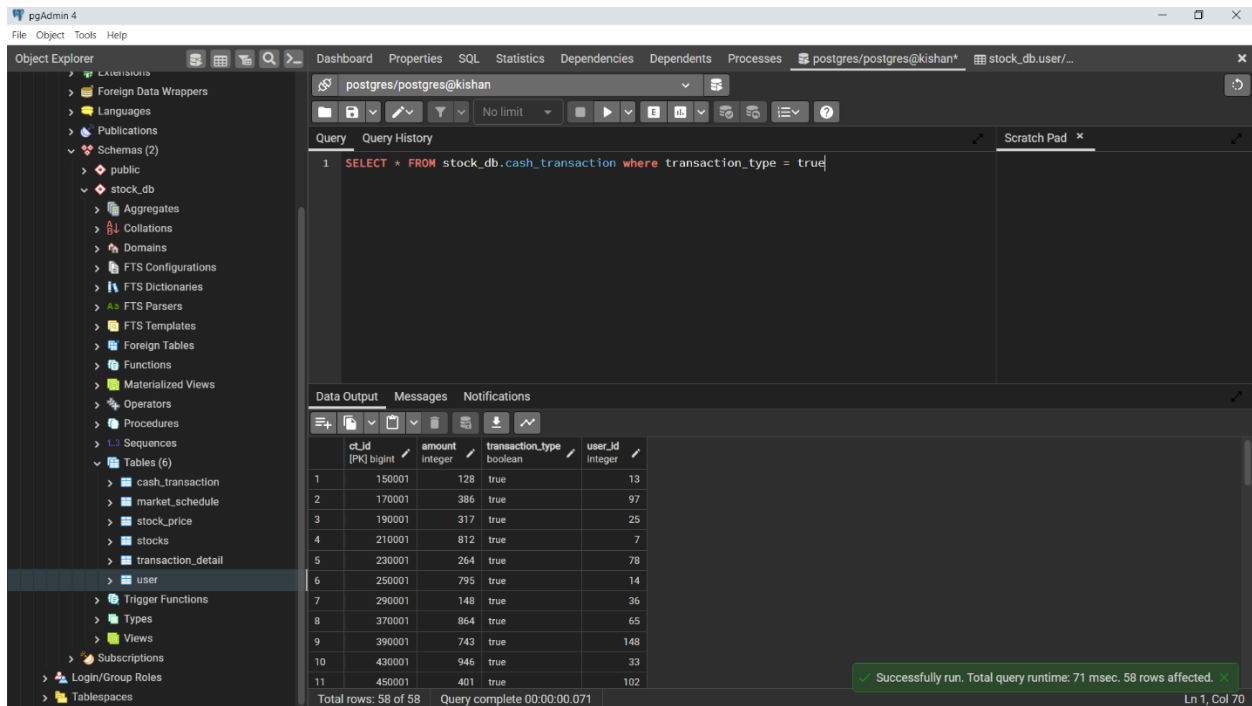
SELECT name FROM stock_db."stocks" where quantity < 100



Tuples -> 13

9)

SELECT * FROM stock_db."cash_transaction" where transaction_type = true



pgAdmin 4

Object Explorer

- Extensions
- Foreign Data Wrappers
- Languages
- Publications
- Schemas (2)
 - public
 - stock_db
 - Aggregates
 - Collations
 - Domains
 - FTS Configurations
 - FTS Dictionaries
 - FTS Parsers
 - FTS Templates
 - Foreign Tables
 - Functions
 - Materialized Views
 - Operators
 - Procedures
 - Sequences
 - Tables (6)
 - cash_transaction
 - market_schedule
 - stock_price
 - stocks
 - transaction_detail
 - user
 - Trigger Functions
 - Types
 - Views
 - Subscriptions
 - Login/Group Roles
 - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependencies Processes postgres/postgres@kishan* stock_db.user/...

Query Query History

1 SELECT * FROM stock_db.cash_transaction where transaction_type = true

Scratch Pad

Data Output Messages Notifications

	ct_id [PK] bigint	amount integer	transaction_type boolean	user_id integer
1	150001	128	true	13
2	170001	386	true	97
3	190001	317	true	25
4	210001	812	true	7
5	230001	264	true	78
6	250001	795	true	14
7	290001	148	true	36
8	370001	864	true	65
9	390001	743	true	148
10	430001	946	true	33
11	450001	401	true	102

Total rows: 58 of 58 Query complete 00:00:00.071

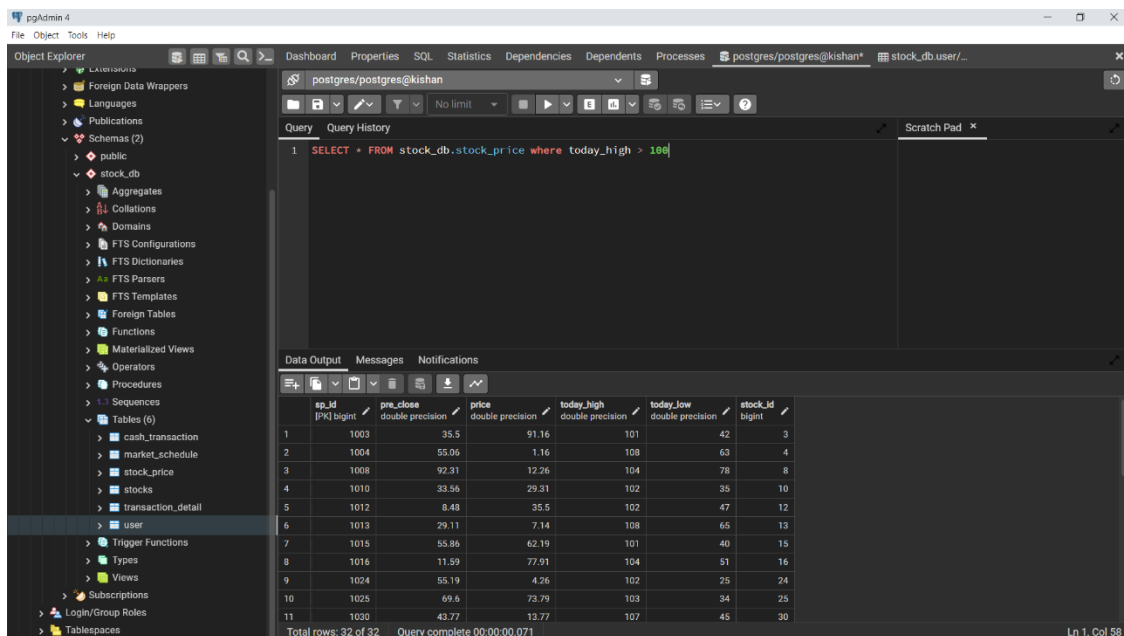
Successfully run. Total query runtime: 71 msec. 58 rows affected.

Ln 1, Col 70

Tuples -> 58

10)

SELECT * FROM stock_db."stock_price" where today_high > 100



pgAdmin 4

Object Explorer

- Extensions
- Foreign Data Wrappers
- Languages
- Publications
- Schemas (2)
 - public
 - stock_db
 - Aggregates
 - Collations
 - Domains
 - FTS Configurations
 - FTS Dictionaries
 - FTS Parsers
 - FTS Templates
 - Foreign Tables
 - Functions
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 - Procedures
 - Sequences
 - Tables (6)
 - cash_transaction
 - market_schedule
 - stock_price
 - stocks
 - transaction_detail
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 - Trigger Functions
 - Types
 - Views
 - Subscriptions
 - Login/Group Roles
 - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependencies Processes postgres/postgres@kishan* stock_db.user/...

Query Query History

1 SELECT * FROM stock_db.stock_price where today_high > 100

Scratch Pad

Data Output Messages Notifications

	sp_id [PK] bigint	pre_close double precision	price double precision	today_high double precision	today_low double precision	stock_id bigint
1	1003	35.5	91.16	101	42	3
2	1004	55.06	1.16	108	63	4
3	1008	92.31	12.26	104	78	8
4	1010	33.56	29.31	102	35	10
5	1012	8.48	35.5	102	47	12
6	1013	29.11	7.14	108	65	13
7	1015	55.86	62.19	101	40	15
8	1016	11.59	77.91	104	51	16
9	1024	55.19	4.26	102	25	24
10	1025	69.6	73.79	103	34	25
11	1030	43.77	13.77	107	45	30

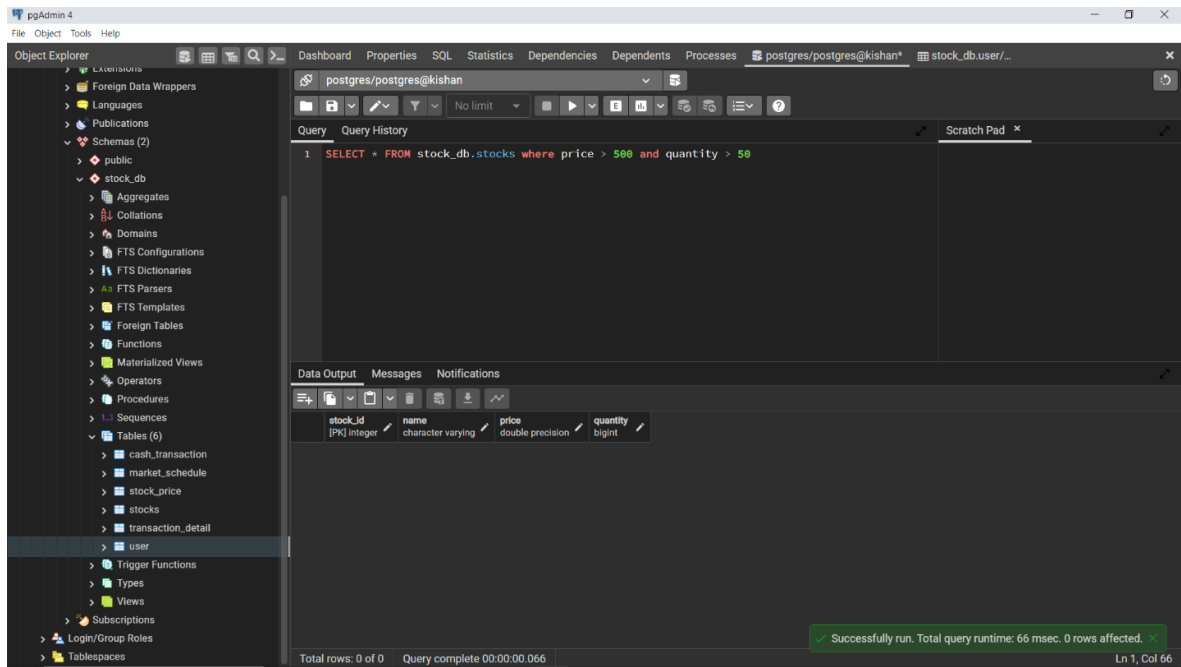
Total rows: 32 of 32 Query complete 00:00:00.071

Ln 1, Col 58

Tuples -> 32

11)

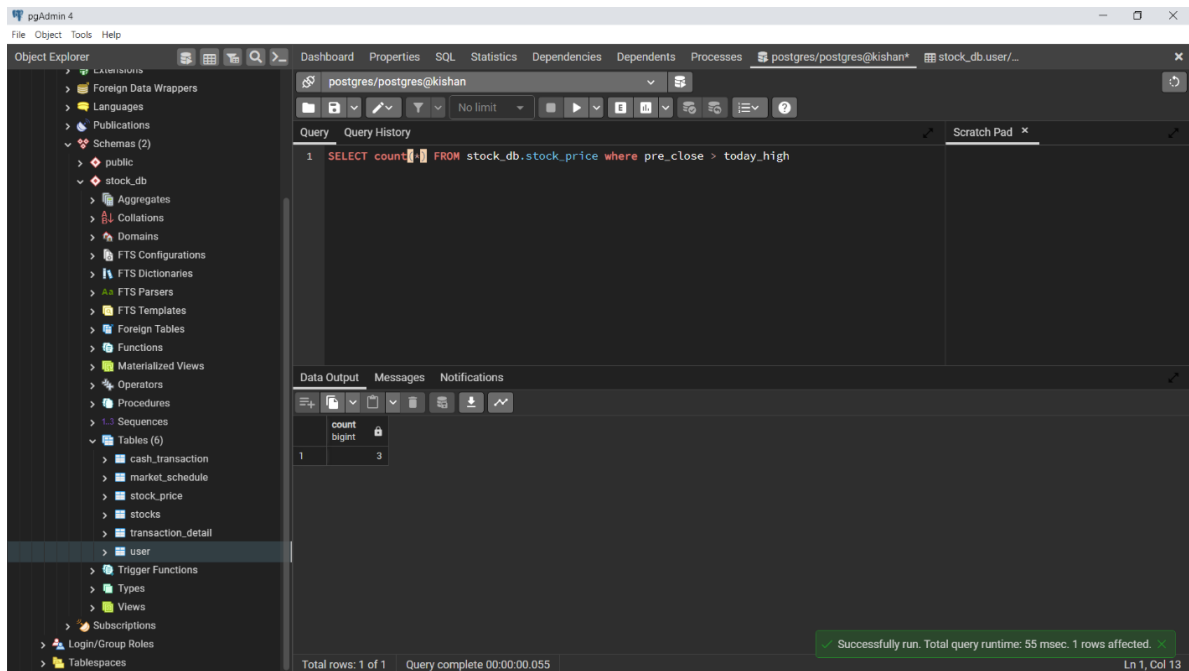
SELECT * FROM stock_db."stocks" where price > 500 and quantity > 50



Tuples -> 0

12)

SELECT count(*) FROM stock_db."stock_price" where pre_close > today_high



Tuples -> 1

13)

SELECT * FROM stock_db."user" where firstname = 'Paul'

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, with the 'stock_db' database selected. The 'user' table is highlighted. The main pane shows a SQL query: `SELECT * FROM stock_db.user where firstname = 'Paul'`. The 'Data Output' tab displays the result of the query, which is a single row with the following data:

user_id [PK] integer	email character varying	firstname character varying	lastname character varying	username character varying	password bigint	user_role boolean
44	etiam@outlook.co.uk	Paul	Hood	WFP332FB79C	8045	false

The status bar at the bottom indicates 'Total rows: 1 of 1' and 'Query complete 00:00:00.064'.

Tuples -> 1

14)

SELECT * FROM stock_db."cash_transaction" where amount between 100 and 200

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, with the 'stock_db' database selected. The 'cash_transaction' table is highlighted. The main pane shows a SQL query: `SELECT * FROM stock_db.cash_transaction where amount between 100 and 200`. The 'Data Output' tab displays the result of the query, which is a table with 9 rows. The status bar at the bottom indicates 'Total rows: 9 of 9' and 'Query complete 00:00:00.077'.

ct_id [PK] bigint	amount integer	transaction_type boolean	user_id integer	
1	150001	128	true	13
2	290001	148	true	36
3	650001	149	true	12
4	870001	139	false	122
5	1490001	162	false	5
6	1530001	128	true	62
7	1730001	153	true	91
8	1830001	166	true	73
9	2070001	102	false	6

A green message box at the bottom right states: 'Successfully run. Total query runtime: 77 msec. 9 rows affected.'

Tuples -> 9

15)

SELECT * FROM stock_db."user" where user_role = true

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the 'Object Explorer' with a tree view of the database structure. The 'stock_db' database is expanded, showing various objects like Aggregates, Collations, Domains, FTS Configurations, FTS Dictionaries, FTS Parsers, FTS Templates, Foreign Tables, Functions, Materialized Views, Operators, Procedures, Sequences, and Tables. The 'user' table is selected under the 'Tables' category.

The main window shows the 'Query' tab with the following SQL query:

```
1 SELECT * FROM stock_db.user where user_role = true
```

The 'Data Output' tab displays the results of the query in a table format:

	user_id [PK] integer	email character varying	firstname character varying	lastname character varying	username character varying	password bigint	user_role boolean
1	1	volutpat.nunc@outlook.couk	Walker	admin	GGY15NM04PX	8576	true
2	2	nunc.commodo@yahoo.net	Connor	admin1	Y0E2300T5GF	3545	true

At the bottom of the interface, a status bar indicates: 'Total rows: 2 of 2', 'Query complete 00:00:00.072', and a green message box stating 'Successfully run. Total query runtime: 72 msec. 2 rows affected.'

Tuples -> 2