Welcome   db_course25/postgres@PostgreSQL 17* ✕

db_course25/postgres@PostgreSQL 17

No limit

Query   Query History

```
1  select * from flights;
2
3  create index i_act_depart on flights(act_departure_time);
4  create unique index comp_fl_dep on flights(flight_id, sch_departure_time);
5  create index dep_arr on flights(departing_airport_id, arriving_airport_id);
6
7  explain analyze select * from flights where departing_airport_id=5 and arriving_airport_id=3;
8
9  select * from baggage;
10 explain analyze select weight_in_kg from baggage where weight_in_kg>10;
11
12 create index weights_10 on baggage(weight_in_kg) where weight_in_kg>10;
13 analyze baggage;
14 explain analyze select weight_in_kg from baggage where weight_in_kg>20;
15
```

Data Output   Messages   Notifications

```
CREATE INDEX

Query returned successfully in 72 msec.
```

✓ Query returned successfully in 72 msec. ✕

Total rows: Query complete 00:00:00.072   CRLF   Ln 3, Col 1

Query   Query History

```sql
1   select * from flights;
2
3   create index i_act_depart on flights(act_departure_time);
4   create unique index comp_fl_dep on flights(flight_id, sch_departure_time);
5   create index dep_arr on flights(departing_airport_id, arriving_airport_id);
6
7   explain analyze select * from flights where departing_airport_id=5 and arriving_airport_id=3;
8
9   select * from baggage;
10  explain analyze select weight_in_kg from baggage where weight_in_kg>10;
11
12  create index weights_10 on baggage(weight_in_kg) where weight_in_kg>10;
13  analyze baggage;
14  explain analyze select weight_in_kg from baggage where weight_in_kg>20;
15
```

Data Output   Messages   Notifications

Showing rows: 1 to 5   Page No: 1   of 1

	QUERY PLAN text
1	Seq Scan on flights (cost=0.00..6.03 rows=1 width=72) (actual time=0.028..0.029 rows=0 loops=…
2	Filter: ((departing_airport_id = 5) AND (arriving_airport_id = 3))
3	Rows Removed by Filter: 202
4	Planning Time: 4.015 ms
5	Execution Time: 0.213 ms

Total rows: 5   Query complete 00:00:00.071   CRLF   Ln 7, Col 1

```
   explain analyze select * from flights where departing_airport_id=5 and arriving_airport_id=3;

8
9   select * from baggage;
10  explain analyze select weight_in_kg from baggage where weight_in_kg>10;
11
12  create index weights_10 on baggage(weight_in_kg) where weight_in_kg>10;
13  analyze baggage;
14  explain analyze select weight_in_kg from baggage where weight_in_kg>20;
15
16  insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
17  values(111,'Vera','Good','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-19 11:28:12','2022-06-16 08:49:42'),
18  (121,'Jane','Las','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-19 11:28:12','2022-06-16 08:49:42');
19
20  select count(distinct passport_number),count(passport_number) from passengers;
21
```

Data Output | Messages | Notifications

	QUERY PLAN text	
1	Seq Scan on baggage (cost=0.00..6.55 rows=185 width=5) (actual time=0.051..0.101 rows=185 loops=...	
2	Filter: (weight_in_kg > '10'::numeric)	
3	Rows Removed by Filter: 19	
4	Planning Time: 2.890 ms	
5	Execution Time: 0.122 ms	

Showing rows: 1 to 5   Page No: 1   of 1

✓ Successfully run. Total query runtime: 1 secs 37 msec. 5 rows affected. ✕

Total rows: 5   Query complete 00:00:01.037

CRLF   Ln 10, Col 1

File   Object   Tools   Edit   View   Window   Help

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db_course25/postgres@PostgreSQL 17   ⟲

Query   Query History

```
 7   explain analyze select * from flights where departing_airport_id=5 and arriving_airport_id=3;
 8
 9   select * from baggage;
10   explain analyze select weight_in_kg from baggage where weight_in_kg>10;
11
12   create index weights_10 on baggage(weight_in_kg) where weight_in_kg>10;
13   analyze baggage;
14   explain analyze select weight_in_kg from baggage where weight_in_kg>20;
15
16   insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
17   values(111,'Vera','Good','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-19 11:28:12','2022-06-16 08:49:42'),
18   (121,'Jane','Las','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-19 11:28:12','2022-06-16 08:49:42');
19
20   select count(distinct passport_number),count(passport_number) from passengers;
21
```

Data Output   Messages   Notifications

Showing rows: 1 to 5   Page No: 1   of 1

	QUERY PLAN text
1	Seq Scan on baggage (cost=0.00..6.55 rows=165 width=5) (actual time=0.010..0.034 rows=165 loops=…
2	Filter: (weight_in_kg > '20'::numeric)
3	Rows Removed by Filter: 39
4	Planning Time: 0.318 ms
5	Execution Time: 0.044 ms

✓ Successfully run. Total query runtime: 70 msec. 5 rows affected. ✕

Total rows: 5   Query complete 00:00:00.070   CRLF   Ln 12, Col 1

```
10    explain analyze select weight_in_kg from baggage where weight_in_kg>10;
11
12    create index weights_10 on baggage(weight_in_kg) where weight_in_kg>10;
13    analyze baggage;
14    explain analyze select weight_in_kg from baggage where weight_in_kg>20;
15
16    insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
17    values(211,'Vera','Good','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-16 08:49:42','2022-06-19 11:28:12');
18    insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
19    values(221,'Jane','Las','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-16 08:49:42','2022-06-19 11:28:12');
20
21    select count(distinct passport_number),count(passport_number) from passengers;
22
23    create unique index pass_idx_uni on passengers(passport_number);
24
```

Data Output | Messages | Notifications

```
INSERT 0 1

Query returned successfully in 41 msec.
```

Query returned successfully in 41 msec.

```
10    explain analyze select weight_in_kg from baggage where weight_in_kg>10;
11
12    create index weights_10 on baggage(weight_in_kg) where weight_in_kg>10;
13    analyze baggage;
14    explain analyze select weight_in_kg from baggage where weight_in_kg>20;
15
16 ⌄  insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
17    values(211,'Vera','Good','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-16 08:49:42','2022-06-19 11:28:12');
18 ⌄  insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
19    values(221,'Jane','Las','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-16 08:49:42','2022-06-19 11:28:12');
20
21    select count(distinct passport_number),count(passport_number) from passengers;
22
23    create unique index pass_idx_uni on passengers(passport_number);
24
```

Data Output · Messages · Notifications

	count bigint 🔒	count bigint 🔒
1	10	206

✓ Successfully run. Total query runtime: 41 msec. 1 rows affected. ✕

Total rows: 1   Query complete 00:00:00.041   CRLF   Ln 20, Col 1

File   Object   Tools   Edit   View   Window   Help

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No limit

Query   Query History

```
18  insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
19  values(221,'Jane','Las','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-16 08:49:42','2022-06-19 11:28:12');
20
21  select count(distinct passport_number),count(passport_number) from passengers;
22
23  create unique index pass_idx_uni on passengers(passport_number);
24
25  create index person_check_b on passengers(country_of_citizenship,date_of_birth,last_name,first_name);
26  create index person_year_country_idx on passengers(extract(year from date_of_birth),country_of_citizenship);
27
28  explain analyze select first_name,last_name,date_of_birth,country_of_citizenship from passengers where extract(year from date_of_birth)=1984 and country_of_citizenship=
29
30  select indexname,indexdef from pg_indexes where tablename='passengers';
31
32
```

Data Output   Messages   Notifications

CREATE INDEX

Query returned successfully in 74 msec.

✓ Query returned successfully in 74 msec. ✕

Total rows: Query complete 00:00:00.074   CRLF   Ln 25, Col 1

Query   Query History

```sql
18   insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
19   values(221,'Jane','Las','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-16 08:49:42','2022-06-19 11:28:12');
20
21   select count(distinct passport_number),count(passport_number) from passengers;
22
23   create unique index pass_idx_uni on passengers(passport_number);
24
25   create index person_check_b on passengers(country_of_citizenship,date_of_birth,last_name,first_name);
26   create index person_year_country_idx on passengers(extract(year from date_of_birth),country_of_citizenship);
27
28   explain analyze select first_name,last_name,date_of_birth,country_of_citizenship from passengers where extract(year from date_of_birth)=1984 and country_of_citizenship=
29
30   select indexname,indexdef from pg_indexes where tablename='passengers';
31
32
```

Data Output   Messages   Notifications

```
CREATE INDEX

Query returned successfully in 74 msec.
```

Total rows: Query complete 00:00:00.074   CRLF   Ln 23, Col 1

File   Object   Tools   Edit   View   Window   Help

Welcome   db_course25/postgres@PostgreSQL 17* ×

db_course25/postgres@PostgreSQL 17

Query   Query History

```
18   insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
19   values(221,'Jane','Las','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-16 08:49:42','2022-06-19 11:28:12');
20
21   select count(distinct passport_number),count(passport_number) from passengers;
22
23   create unique index pass_idx_uni on passengers(passport_number);
24
25   create index person_check_b on passengers(country_of_citizenship,date_of_birth,last_name,first_name);
26   create index person_year_country_idx on passengers(extract(year from date_of_birth),country_of_citizenship);
27
28   explain analyze select first_name,last_name,date_of_birth,country_of_citizenship from passengers
29   where extract(year from date_of_birth)=1984 and country_of_citizenship='Philippines';
30
31   select indexname,indexdef from pg_indexes where tablename='passengers';
32
33
```

Data Output   Messages   Notifications

Showing rows: 1 to 4   Page No: 1   of 1

	QUERY PLAN text
1	Index Scan using person_year_country_idx on passengers (cost=0.14..8.16 rows=1 width=26) (actual time=0.027..0.027 rows=0 loops=...
2	Index Cond: ((EXTRACT(year FROM date_of_birth) = '1984'::numeric) AND ((country_of_citizenship)::text = 'Philippines'::text))
3	Planning Time: 1.329 ms
4	Execution Time: 0.039 ms

✓ Successfully run. Total query runtime: 39 msec. 4 rows affected. ×

Total rows: 4   Query complete 00:00:00.039   CRLF   Ln 28, Col 1

File Object Tools Edit View Window Help

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db_course25/postgres@PostgreSQL 17

Query   Query History

```sql
18  insert into passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,country_of_residence,passport_number,created_at,updated_at)
19  values(221,'Jane','Las','1943-06-22','female','Kazakhstan','Japan','P0000011','2022-06-16 08:49:42','2022-06-19 11:28:12');
20
21  select count(distinct passport_number),count(passport_number) from passengers;
22
23  create unique index pass_idx_uni on passengers(passport_number);
24
25  create index person_check_b on passengers(country_of_citizenship,date_of_birth,last_name,first_name);
26  create index person_year_country_idx on passengers(extract(year from date_of_birth),country_of_citizenship);
27
28  explain analyze select first_name,last_name,date_of_birth,country_of_citizenship from passengers
29  where extract(year from date_of_birth)=1984 and country_of_citizenship='Philippines';
30
31  select indexname,indexdef from pg_indexes where tablename='passengers';
32
33
```

Data Output   Messages   Notifications

Showing rows: 1 to 3   Page No: 1   of 1

	indexname name	indexdef text
1	passengers_pkey	CREATE UNIQUE INDEX passengers_pkey ON public.passengers USING btree (passenger_id)
2	person_check_b	CREATE INDEX person_check_b ON public.passengers USING btree (country_of_citizenship, date_of_birth, last_name, first_name)
3	person_year_country_idx	CREATE INDEX person_year_country_idx ON public.passengers USING btree (EXTRACT(year FROM date_of_birth), country_of_citizenship)

✓ Successfully run. Total query runtime: 201 msec. 3 rows affected. ✕

Total rows: 3   Query complete 00:00:00.201   CRLF   Ln 31, Col 1