

ДЕМОНСТРАЦИЯ PGBENCH

Скриншот 1: вывод инициализации базы

```
bench=# \q
# kristiawe@kristina 22:22:28> <~/pg_homework/database_ansi1 on main*>
$ pgbench -i -s 1 -U pgbench -p 5432 bench
dropping old tables...
NOTICE: table "pgbench_accounts" does not exist, skipping
NOTICE: table "pgbench_branches" does not exist, skipping
NOTICE: table "pgbench_history" does not exist, skipping
NOTICE: table "pgbench_tellers" does not exist, skipping
creating tables...
generating data (client-side)...
vacuuming...
creating primary keys...
done in 0.38 s (drop tables 0.00 s, create tables 0.02 s, client-side generate 0.20 s, vacuum 0.09 s, primary keys 0.07 s).
# kristiawe@kristina 22:22:32> <~/pg_homework/database_ansi1 on main*>
$ |
```

Скриншот 2: вывод pgbench после теста

Результаты 30 секундного теста с 5 клиентами и 2 потоками

```
# kristiawe@kristina 22:22:32> <~/pg_homework/database_ansi1 on main*>
$ pgbench -c 5 -j 2 -T 30 -U pgbench -p 5432 bench
pgbench (17.7 (Ubuntu 17.7-0ubuntu0.25.04.1))
starting vacuum...end.
transaction type: <builtin: TPC-B (sort of)>
scaling factor: 1
query mode: simple
number of clients: 5
number of threads: 2
maximum number of tries: 1
duration: 30 s
number of transactions actually processed: 16471
number of failed transactions: 0 (0.000%)
latency average = 9.105 ms
initial connection time = 20.386 ms
tps = 549.127911 (without initial connection time)
# kristiawe@kristina 22:24:24> <~/pg_homework/database_ansi1 on main*>
$ |
```

"Скриншот 3: топ 5 самых долгих запросов

query	calls	shared_blks_written	local_blks_written	temp_blks_written
copy pgbench_accounts from stdin with (freeze on)	1	1669	0	0
INSERT INTO pgbench_history (tid, bid, aid, delta, mtime) VALUES (\$1, \$2, \$3, \$4, CURRENT_TIMESTAMP)	16471	109	0	0
UPDATE pgbench_accounts SET abalance = abalance + \$1 WHERE aid = \$2	16471	30	0	0
CREATE EXTENSION IF NOT EXISTS pg_stat_statements	2	9	0	0
CREATE TABLE IF NOT EXISTS users(id serial PRIMARY KEY, name text)	1	7	0	0
(5 rows)				

Скриншот 4: топ 5 запросов по write IO

```
# kristiawe@kristina 22:27:18> <~/pg_homework/database_ansi1 on main*>
$ psql -U postgres -p 5432 -d bench -c "
SELECT query, calls, shared_blks_written, local_blks_written, temp_blks_written
FROM pg_stat_statements
ORDER BY shared_blks_written DESC
LIMIT 5;
"
```

query	calls	shared_blks_written	local_blks_written	temp_blks_written
copy pgbench_accounts from stdin with (freeze on)	1	1669	0	0
INSERT INTO pgbench_history (tid, bid, aid, delta, mtime) VALUES (\$1, \$2, \$3, \$4, CURRENT_TIMESTAMP)	16471	109	0	0
UPDATE pgbench_accounts SET abalance = abalance + \$1 WHERE aid = \$2	16471	30	0	0
CREATE EXTENSION IF NOT EXISTS pg_stat_statements	2	9	0	0
CREATE TABLE IF NOT EXISTS users(id serial PRIMARY KEY, name text)	1	7	0	0
(5 rows)				