

PostgreSQL + Prisma ORM Cheat Sheet (2025 Edition)

PostgreSQL Commands

Database Creation: `CREATE DATABASE mydb;`

List Databases: `\l`

Connect to DB: `\c mydb`

Create Table: `CREATE TABLE users (id SERIAL PRIMARY KEY, name VARCHAR(50));`

Insert Data: `INSERT INTO users (name) VALUES ('Alan');`

Select Data: `SELECT * FROM users;`

Update Data: `UPDATE users SET name='Turing' WHERE id=1;`

Delete Data: `DELETE FROM users WHERE id=1;`

JSONB Query: `SELECT jsonb_set('{"name": "Alan"}'::jsonb, '{name}', '"Turing"'::jsonb);`

Index Creation: `CREATE INDEX idx_name ON users(name);`

CTE (With Clause): `WITH recent AS (SELECT * FROM users WHERE id > 10) SELECT * FROM recent;`

Window Functions: `SELECT name, ROW_NUMBER() OVER (ORDER BY name) FROM users;`

Prisma ORM Commands

Prisma Init: `npx prisma init`

Generate Client: `npx prisma generate`

Migrate DB: `npx prisma migrate dev --name init`

Create User: `prisma.user.create({ data: { name: 'Alan' } });`

Find Users: `prisma.user.findMany();`

Update User: `prisma.user.update({ where: { id: 1 }, data: { name: 'Turing' } });`

Delete User: `prisma.user.delete({ where: { id: 1 } });`

Relations (One-to-Many): `@relation(fields: [userId], references: [id])`

Best Practices & Tips

Always use Connection Pooling (PgBouncer or Prisma Pool)

Use JSONB instead of JSON for better indexing

Use CTE for recursive queries

Use Prisma Transactions for atomic operations

Index GIN for JSONB fields