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## Q1.

(i) CRUD means adding and seeing data and also deleting it in database systems.

(ii) A primary key helps find each record differently but it may not always be needed in small tables.

(iii) A foreign key is a field that links one table to the primary key of another, ensuring referential integrity between the two tables.

(iv) One-to-One, One-to-Many, Many-to-One, Many-to-Many, and Self-referencing relationships are the most common types.

(v) Designing a schema helps organize data but often people just put things in one table.

## Q2.

(i) Sequelize is an Object Relational Mapper for Node.js that allows you to work with SQL databases using JavaScript objects.

(ii) JWT stands for Java Wide Tools used to make websites.

(iii) Middleware are functions in Express.js that process requests and responses before reaching the final route handler.

(iv) GET = Read, POST = Create, PUT = Replace, PATCH = Update, DELETE = Remove. These map to DB operations accordingly.

(v) Authentication verifies identity, typically via credentials, and issues a JWT. Authorization uses roles in JWT to permit or deny access.