

AY21/22 SEM 1 · [github/jovyntls](#)

The diagram shows a network of tables and relationships:

- Table C** is connected to **Table A** and **Relationship S**. It has attributes c1 (underlined) and c2.
- Table A** is connected to **Relationship R**. It has attributes a2 and a1 (underlined).
- Relationship S** is connected to **Table C**, **Table A**, and **Relationship T**. It has attribute s1.
- Relationship R** is connected to **Table A** and **Table B**. It has attribute r1.
- Table B** is connected to **Relationship R** and **Relationship T**. It has attributes b2 and b1 (underlined).
- Relationship T** is connected to **Relationship S** and **Table D**. It has attribute t1 (underlined).
- Table D** is connected to **Relationship T**. It has attributes d1 (underlined) and d2.

```
CREATE TABLE B (  
    b1 INTEGER PRIMARY KEY,  
    b2 INTEGER  
);
```

```
CREATE TABLE D (
  d1 INTEGER PRIMARY KEY,
  d2 INTEGER
);
```

```
CREATE TABLE S ( a1 INTEGER,
b1 INTEGER,
c1 INTEGER REFERENCES C,
s1 INTEGER,
PRIMARY KEY (a1, b1, c1),
FOREIGN KEY (a1, b1) REFERENCES R
);
```

```
CREATE TABLE T (
  a1 INTEGER,
  b1 INTEGER,
  c1 INTEGER,
  d1 INTEGER REFERENCES D,
  t1 INTEGER,
  PRIMARY KEY (a1, b1, c1, d1, t1),
  FOREIGN KEY (a1, b1, c1) REFERENCES S
);
```

```
CREATE TABLE B (
  a1 INTEGER PRIMARY KEY REFERENCES A ON DELETE CASCADE,
  b1 INTEGER
);
```

```
CREATE TABLE D (
  a1 INTEGER PRIMARY KEY REFERENCES B REFERENCES C ON DELETE
    CASCADE,
  d1 INTEGER
);
```

```
CREATE TABLE F (
    a1 INTEGER PRIMARY KEY REFERENCES C
    ON DELETE CASCADE, f1 INTEGER
);
```

The diagram shows a network of entities and relationships. Entity C (double rectangle) is connected to entity S (double diamond) by a thick line. Entity S is connected to entity B (double rectangle) by a thin line. Entity B is connected to entity R (double diamond) by a thick line. Entity A (single rectangle) is connected to entity R by a thin line. Entity C has attributes c1 and c2. Entity B has attributes b1 and b2. Entity A has attributes a2 and a1. Entity R is a relationship between B and A.

```
CREATE TABLE B (
    a1 INTEGER REFERENCES A ON DELETE CASCADE ,
    b1 INTEGER ,
    b2 INTEGER ,
    PRIMARY KEY (a1, b1)
);
```

```
CREATE TABLE C (
  a1 INTEGER,
  b1 INTEGER,
  c1 INTEGER,
  c2 INTEGER,
  PRIMARY KEY (a1, b1, c1),
  FOREIGN KEY (a1, b1) REFERENCES B ON DELETE CASCADE
);
```