

Zwei Tabellen mit Fremdschlüsselbeziehung

```
CREATE TABLE R (  
    ID int PRIMARY KEY,  
    a int  
)
```

```
CREATE TABLE S (  
    ID int PRIMARY KEY,  
    FKaufR int REFERENCES R  
)
```

Beispieldaten erzeugen...

INSERT INTO

R

VALUES

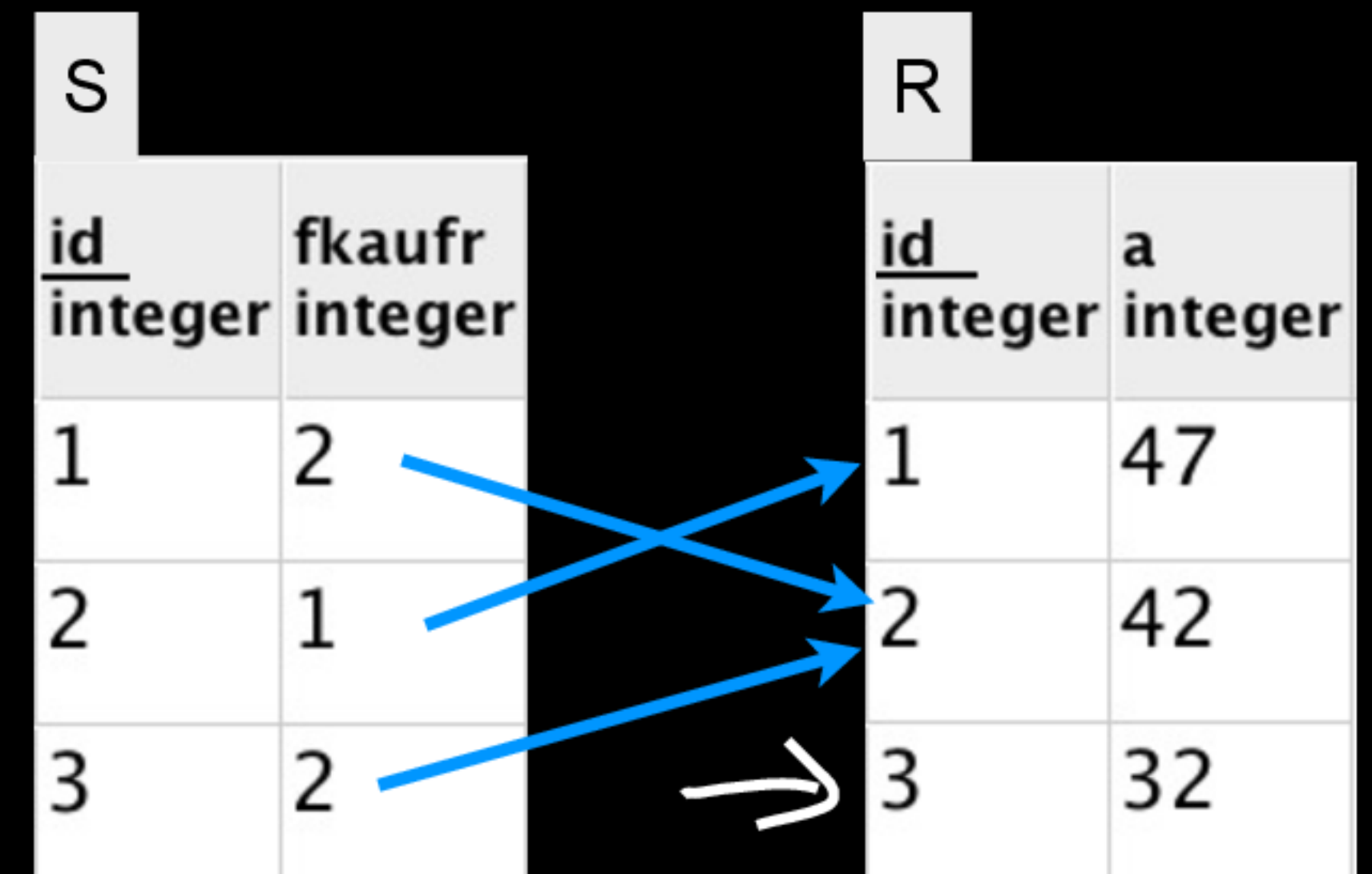
(1, 47), (2, 42), (3, 32)

INSERT INTO

S

VALUES

(1, 2), (2, 1), (3, 2)



Daten aus R löschen...

DELETE FROM R

WHERE ID=2

ERROR: update or delete on table "r" violates foreign key constraint "s_fkaufr_fkey" on table "s"
DETAIL: Key (id)=(2) is still referenced from table "s".

DELETE FROM R

WHERE ID=3


Query returned successfully: one row affected, 19 ms execution time.

S		R	
<u>id</u> integer	fkaufr integer	<u>id</u> integer	a integer
1	2	1	47
2	1	2	42
3	2	3	32

Default

```
CREATE TABLE R (  
    ID int PRIMARY KEY,  
    a int  
)
```

```
CREATE TABLE S (  
    ID int PRIMARY KEY,  
    FKaufR int REFERENCES R  
)
```



NO ACTION

```
CREATE TABLE R (  
    ID int PRIMARY KEY,  
    a int  
)
```

```
CREATE TABLE S (  
    ID int PRIMARY KEY,  
    FKaufR int REFERENCES R  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION  
)
```



SET NULL

```
CREATE TABLE R (  
    ID int PRIMARY KEY,  
    a int  
)  
  
CREATE TABLE S (  
    ID int PRIMARY KEY,  
    FKaufR int REFERENCES R  
    ON DELETE SET NULL  
)
```



SET NULL: Daten aus R löschen...

DELETE FROM R

WHERE ID=2

Query returned successfully: one row affected, 20 ms execution time.

S		R	
<u>id</u> integer	fkaufr integer	<u>id</u> integer	a integer
1	2	1	47
2	1	2	42
3	2	3	32

vorher

S		R	
<u>id</u> integer	fkaufr integer	<u>id</u> integer	a integer
1		1	47
2	1	3	32
3			

nachher

CASCADE

```
CREATE TABLE R (  
    ID int PRIMARY KEY,  
    a int  
)  
  
CREATE TABLE S (  
    ID int PRIMARY KEY,  
    FKaufR int REFERENCES R  
    ON DELETE CASCADE  
)
```


CASCADE: Daten aus R löschen...

DELETE FROM

WHERE

R

ID=2

Query returned successfully: one row affected, 20 ms execution time.

S		R	
<u>id</u> integer	fkaufr integer	<u>id</u> integer	a integer
1	2	1	47
2	1	2	42
3	2	3	32

vorher

S		R	
<u>id</u> integer	fkaufr integer	<u>id</u> integer	a integer
2	1	1	47
		3	32

nachher

SET DEFAULT

```
CREATE TABLE R (
```

```
    ID int PRIMARY KEY,
```

```
    a int
```

```
)
```

```
CREATE TABLE S (
```

```
    ID int PRIMARY KEY,
```

```
    FKaufR int DEFAULT 3 REFERENCES R
```

```
ON DELETE SET DEFAULT
```

```
)
```

SET DEFAULT: Daten aus R löschen...

DELETE FROM R

WHERE ID=2

Query returned successfully: one row affected, 20 ms execution time.

S		R	
<u>id</u> integer	fkaufr integer	<u>id</u> integer	a integer
1	2	1	47
2	1	2	42
3	2	3	32

vorher

S		R	
<u>id</u> integer	fkaufr integer	<u>id</u> integer	a integer
1	3	1	47
2	1	3	32
3	3		

nachher

DROP TABLE CASCADE

DROP TABLE R

ERROR: cannot drop table r because other objects depend on it
DETAIL: constraint s_fkaufr_fkey on table s depends on table r
HINT: Use DROP ... CASCADE to drop the dependent objects too.

DROP TABLE R CASCADE

S		R	
<u>id</u> integer	fkaufr integer	<u>id</u> integer	a integer
1	2	1	47
2	1	2	42
3	2	3	32

vorher

S	
<u>id</u> integer	fkaufr integer
1	2
2	1
3	2

nachher

Effekt von DROP TABLE CASCADE

```
CREATE TABLE S (  
    ID int PRIMARY KEY,  
    FKaufR int DEFAULT 3  
)
```

<u>id</u> integer	fkaufR integer
1	2
2	1
3	2

