

1.

```
CREATE TABLE autor (auID int NOT NULL PRIMARY KEY, nazwisko varchar(50) NOT NULL, telefon varchar(50));
```

```
CREATE TABLE wydawnictwo (wydID int PRIMARY KEY NOT NULL, nazwa varchar(50) NOT NULL, telefon varchar(50));
```

```
CREATE TABLE ksiazka (isbn char(13) NOT NULL PRIMARY KEY, tytul VARCHAR(50) NOT NULL, wydID int references wydawnictwo(wydID) NOT NULL, cena double precision NOT NULL);
```

```
CREATE TABLE ksiazka_autor (isbn char(13) references ksiazka(isbn) NOT NULL, auID int references autor(auID) NOT NULL, CONSTRAINT isbn_auID PRIMARY KEY(isbn,auID));
```

2.

```
INSERT INTO autor VALUES(4, 'Roman', '444-44-44');
```

```
INSERT INTO autor VALUES(2, 'Jones', '555-55-55');
```

```
INSERT INTO autor VALUES(8, 'Snoopy');
```

```
INSERT INTO wydawnictwo VALUES(1, 'Big House', '414-41-41');
```

```
INSERT INTO wydawnictwo VALUES(2, 'Alpha Press', '999-99-99');
```

```
INSERT INTO ksiazka VALUES('1-111-1111-11', 'C++', 1, 29.95);
```

```
INSERT INTO ksiazka VALUES('6-999-9999-99', 'Main Street', 2, 51.00);
```

```
INSERT INTO ksiazka_autor VALUES('1-111-1111-11', 4);
```

```
INSERT INTO ksiazka_autor VALUES('6-999-9999-99', 2);
```

```
INSERT INTO ksiazka_autor VALUES('6-999-9999-99', 8);
```

3. SELECT * FROM autor;

	auID [PK] integer	nazwisko character varying (50)	telefon character varying (50)
1	4	Roman	444-44-44
2	2	Jones	555-55-55
3	8	Snoopy	[null]

SELECT * FROM wydawnictwo;

	wydID [PK] integer	nazwa character varying (50)	telefon character varying (50)
1	1	Big House	414-41-41
2	2	Alpha Press	999-99-99

```
SELECT * FROM ksiazka;
```

	isbn [PK] character (13)	tytul character varying (50)	wydid integer	cena double precision
1	1-111-1111-11	C++	1	29.95
2	6-999-9999-99	Main Street	2	51

```
SELECT * FROM ksiazka_autor;
```

	isbn [PK] character (13)	auid [PK] integer
1	1-111-1111-11	4
2	6-999-9999-99	2
3	6-999-9999-99	8

4.

```
UPDATE wydawnictwo
```

```
SET nazwa = 'House Press'
```

```
WHERE wydID = 1;
```

	wydid [PK] integer	nazwa character varying (50)	telefon character varying (50)
1	2	Alpha Press	999-99-99
2	1	House Press	414-41-41

5.

```
ALTER TABLE wydawnictwo
```

```
ADD data DATE;
```

```
UPDATE wydawnictwo
```

```
SET data = '2000-01-01'
```

```
WHERE wydID = 1;
```

```
UPDATE wydawnictwo
```

```
SET data = '1990-05-29'
```

```
WHERE wydID = 2;
```

	wydid [PK] integer	nazwa character varying (50)	telefon character varying (50)	data date
1	1	House Press	414-41-41	2000-01-01
2	2	Alpha Press	999-99-99	1990-05-29

6.

```
ALTER TABLE ksiazka DROP COLUMN wydID;
```

```
ALTER TABLE wydawnictwo DROP COLUMN wydID;
```

```
ALTER TABLE wydawnictwo ADD CONSTRAINT nazwa_telefon PRIMARY KEY (nazwa,telefon);
```

```
ALTER TABLE ksiazka ADD nazwa VARCHAR(50),ADD telefon VARCHAR(50),
```

```
ADD CONSTRAINT nazwa_telefon FOREIGN KEY (nazwa, telefon) REFERENCES  
wydawnictwo(nazwa,telefon);
```

```
SELECT * FROM ksiazka;
```

	isbn [PK] character (13)	tytul character varying (50)	cena double precision	nazwa character varying (50)	telefon character varying (50)
1	1-111-1111-11	C++	29.95	[null]	[null]
2	6-999-9999-99	Main Street	51	[null]	[null]

```
UPDATE ksiazka SET nazwa='House Press', telefon='414-41-41' WHERE isbn='1-111-1111-11';
```

```
UPDATE ksiazka SET nazwa='Alpha Press', telefon='999-99-99' WHERE isbn='6-999-9999-99';
```

Data Output		Explain	Messages	Notifications		
	isbn [PK] character (13)	tytul character varying (50)	cena double precision	nazwa character varying (50)	telefon character varying (50)	
1	1-111-1111-11	C++	29.95	House Press	414-41-41	
2	6-999-9999-99	Main Street	51	Alpha Press	999-99-99	

7.

```
ALTER TABLE ksiazka
```

```
ALTER COLUMN cena TYPE INT;
```

```
SELECT cena FROM ksiazka;
```

cena integer
30
51