

EX1.

```
CREATE TABLE people(  
  id INT,  
  first_name VARCHAR(20),  
  last_name VARCHAR(20),  
  address_id INT  
);
```

```
CREATE TABLE pets(  
  id INT,  
  name VARCHAR(20),  
  species VARCHAR(20),  
  owner_id int  
);
```

1. add a primary key to the id fields in the pets and people tables

```
ALTER TABLE pets
```

```
ADD PRIMARY KEY (id);
```

```
ALTER TABLE people
```

```
ADD PRIMARY KEY (id);
```

verify

2. add a fk to the owner_id field in the pets table referencing the id field in the people table

```
ALTER TABLE pets
```

```
ADD CONSTRAINT pets_owner
```

```
FOREIGN KEY (owner_id) REFERENCES people(id);
```

verify

102 • DESCRIBE pets;

103 • DESCRIBE people;

Result Grid | Filter Rows: | Export: | Wrap Cell

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	
name	varchar(20)	YES		NULL	
species	varchar(20)	YES		NULL	
owner_id	int	YES	MUL	NULL	

3. add a column named email to the people table

ALTER TABLE people

ADD COLUMN email VARCHAR(30);

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Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	<div>NONE</div>	
first_name	varchar(20)	YES		<div>NONE</div>	
last_name	varchar(20)	YES		<div>NONE</div>	
address_id	int	YES	MUL	<div>NONE</div>	
email	varchar(30)	YES		<div>NONE</div>	

- add a unique constraint to the email column in the people table

ALTER TABLE people

ADD CONSTRAINT u_email UNIQUE (email);

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	<div>NONE</div>	
first_name	varchar(20)	YES		<div>NONE</div>	
last_name	varchar(20)	YES		<div>NONE</div>	
address_id	int	YES	MUL	<div>NONE</div>	
email	varchar(30)	YES	UNI	<div>NONE</div>	

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- rename the name column in the pets table to 'first_name'

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	<div>NONE</div>	
name	varchar(20)	YES		<div>NONE</div>	
species	varchar(20)	YES		<div>NONE</div>	
owner_id	int	YES	MUL	<div>NONE</div>	

ALTER TABLE pets CHANGE `name` `first_name` VARCHAR(20);

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	<div>NONE</div>	
first_name	varchar(20)	YES		<div>NONE</div>	
species	varchar(20)	YES		<div>NONE</div>	
owner_id	int	YES	MUL	<div>NONE</div>	

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- change the postcode data type to char(7) in the address table

ALTER TABLE addresses MODIFY postcode CHAR(7);

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	<div>NONE</div>	
house_number	int	YES		<div>NONE</div>	
city	varchar(30)	YES		<div>NONE</div>	
postcode	char(7)	YES		<div>NONE</div>	

verify