



## Exercise 6.2: Create an authoritative forward zone for the `example.com` domain with the following settings

- 30 second TTL
- `www.example.com` has the address `192.168.111.45` and the IPv6 address `fe80::22c9:d0ff:1ecd:c0ef`
- `foo.example.com` has the address `192.168.121.11`
- `bar.example.com` has a CNAME pointing to `www.example.com`
- `host1.example.com` through `host100.example.com` have the addresses `10.20.45.1` through `10.20.45.100`

## Solution 6.2

1. Create an entry in the `named.conf` file for your new zone.

- For **OpenSUSE** or **CentOS**:

Edit the file `/etc/named.conf` Add a stanza like this:

```
zone "example.com." IN {
    type master;
    file "example.com.zone";
};
```

- For **Ubuntu**:

Edit the file `/etc/bind/named.conf.local` Add a stanza like this:

```
zone "example.com." IN {
    type master;
    file "/etc/bind/example.com.zone";
};
```

2. Create a new zone file for the `example.com` domain.

- For **CentOS** put your zone files in the directory `/var/named/`.
- For **OpenSUSE** put your zone files in the directory `/var/lib/named/`.
- For **Ubuntu** put your zone files in the directory `/etc/bind/`.

```
$TTL 30
@ IN SOA localhost. admin.example.com. (
2012092901 ; serial YYYYMMDDRR format
3H        ; refresh
1H        ; retry
2H        ; expire
1M)       ; neg ttl
        IN NS localhost.;
www.example.com. IN A 192.168.111.45
www.example.com. IN AAAA fe80::22c9:d0ff:1ecd:c0ef
foo.example.com. IN A 192.168.121.11
bar.example.com. IN CNAME www.example.com.

;generate one hundred entries host1 thru host100
$GENERATE 1-100 host$.example.com. IN A 10.20.45.$
```

3. Test your configuration with **named-checkzone** or **named-checkconf -z**
4. Restart the **named** daemon

```
# systemctl restart named
```

NOTE: the command for **Ubuntu** is:

```
# systemctl restart bind9.service
```

5. Test your new DNS entries.

```
$ dig @localhost -t A www.example.com
$ dig @localhost -t AAAA www.example.com
$ dig @localhost -t A foo.example.com
$ dig @localhost -t CNAME bar.example.com
$ dig @localhost -t A host7.example.com
$ dig @localhost -t A host37.example.com
```