Obviously if you cannot ssh into your machine, you have a problem!!!

Install the required dns packages

sudo apt-get install bind9
Configure DNS server to be authoritative for my domain

$ sudo vi /etc/bind/named.conf.local
// Do any local configuration here

zone "thegummibear.com" {
    type master;
    file "/etc/bind/db.thegummibear.com";
    allow-transfer { 144.38.199.163; localhost; };
    notify yes;
    allow-query { any; };
}

// Consider adding the 1918 zones here, if they are not used in your organization
//include "/etc/bind/zones.rfc1918";
Now create the zone file for my domain.

The following file has an empty template that I can configure according to my needs.

```
sudo cp /etc/bind/db.empty /etc/bind/db.thegummibear.com
```

Now to customise it

$ sudo vi /etc/bind/db.thegummibear.com
; BIND reverse data file for empty rfc1918 zone
;
; DO NOT EDIT THIS FILE - it is used for multiple zones.
; Instead, copy it, edit named.conf, and use that copy.
;
$TTL  3600
@ IN SOA ns1.thegummibear.com. root.ns1.thegummibear.com. ( 2016090601 ; Serial
  3600 ; Refresh
  300  ; Retry
  241920 ; Expire
  60)  ; Negative Cache TTL
;
@ IN NS ns1.thegummibear.com.
@ IN NS ns2.thegummibear.com.

; A address records
;
ns1 IN A  144.38.199.162
ns2 IN A  144.38.199.163
mail IN A  144.38.199.164
www IN A  144.38.199.165
Now restart the dns service so bind will see your changes

```bash
joe@ns1-thegummibear:~$ sudo service bind9 restart
```

We must check if there were any errors

sudo less /var/log/syslog
Inc. (ISC), a non-profit 501(c)(3) public-benefit corporation. Support and training for BIND 9 are available at https://www.isc.org/support

- Adjusted limit on open files from 4096 to 1048576
- Found 1 CPU, using 1 worker thread
- Using 1 UDP listener per interface
- Using up to 4096 sockets
- Loading configuration from '/etc/bind/named.conf'

Failed to include configuration:
/etc/bind/named.conf:11: missing ';' before 'include'

Configuration loading failure resulted in:
- Exiting (due to fatal error)

Additionally:
- Main process exited with code=1/FAILURE
- Remote Control connection failed
- Control process exited with status=1
- Unit entered failed state
- Failed with result 'exit-code'.
/// Do any local configuration here

zone "thegummibear.com" {
    type master;
    file "/etc/bind/db.thegummibear.com";
    allow-transfer { 144.38.199.163; localhost; }
    notify yes;
    allow-query { any; }
}; //I forgot this semicolon on this line!!!

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";
Yay, it is sending notifies

Now let's test actual DNS functionality. Using the DIG command
joe@ns1-thegummibear: /etc/bind
joe@ns1-thegummibear: /etc/bind$ dig @localhost www.thegummibear.com A
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 17906
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 2, ADDITIONAL: 3

;; OPT PSEUDOSECTION:
;EDNS: version: 0, flags:; udp: 4096
;; QUESTION SECTION:
.www.thegummibear.com.  IN  A

;; ANSWER SECTION:
.www.thegummibear.com.  3600  IN  A  144.38.199.165

;; AUTHORITY SECTION:

;; ADDITIONAL SECTION:
ns1.thegummibear.com.  3600  IN  A  144.38.199.162
ns2.thegummibear.com.  3600  IN  A  144.38.199.163

;; Query time: 0 msec
;; SERVER: ::1#53(::1)
;; WHEN: Tue Sep 06 09:40:57 MDT 2016
;; MSG SIZE  rcvd: 133
joe@ns1-thegummibear: /etc/bind

joe@ns1-thegummibear: /etc/bind$ dig @144.38.199.162 www.thegummibear.com A
echo "test all of your A records to make sure they resolve correctly"
Could also test for other record types

dig @144.38.199.162 thegummibear.com SOA
The only 2 files that you should be editing for now are the named.conf.local file or the zone file. Check these if you have errors.
The only 2 files that you should be editing for now are the named.conf.local file or the zone file. Check these if you have errors.

When you edit the zone file, you MUST increment the serial number or notify will not happen.

You must also restart bind whenever you make changes.

Tests with dig after you change something.