Port Forwarding:

To allow a device to be connected to or accessed from outside your network you will need to configure your router.

Port forwarding allows your router to pass on requests that it receives from outside the network to a specific port, this is required if you are running a server or a database on your local network.

To do this first access the router by typing your getaway.

On Windows go to "settings" then to "network and internet"

From there navigate to "Network and Sharing Center" and select "change Adapter settings"

Select the network you are using (wifi or ethernet)
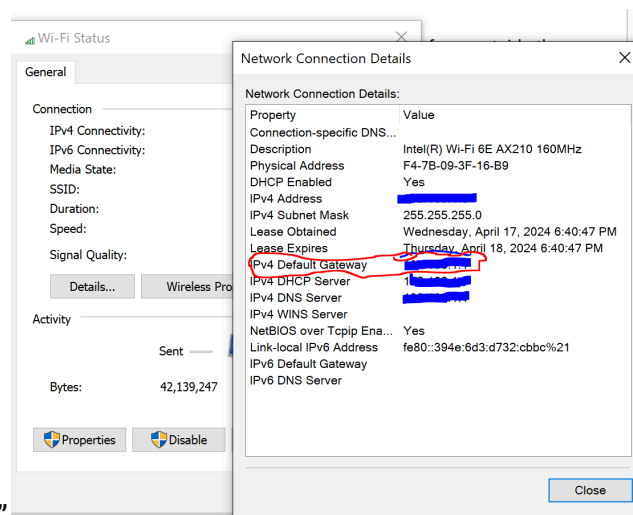
Then click on "details"

On linux open a terminal and run "ip route | grep default"

`default via 192.168.0.1 dev wlp1s0 proto dhcp metric 600`

Copy the gateway address and type that on your browser as a url and you should be taken to your router webpage and asked to log in(usual log in is admin and the password is password)

From there it is a different process depending on the router but generally navigate to the advanced settings and selected allow port forwarding, you will then be asked to give an the ip address for the device that you are allowing port forwarding to and the ports that will be port forwarded(port 22 is the default ssh port)

After that click apply to apply those settings.

SSH remotely

First you need to get the public ip of the server you are trying to connect to and as such you will need to run this command on that device "curl ifconfig.me"

Then you will need the device local ip by running "ip a"

```
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default
qlen 1000
   link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
   inet 127.0.0.1/8 scope host lo
      valid_lft forever preferred_lft forever
   inet6 ::1/128 scope host
      valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group defau
lt qlen 1000
   link/ether 00:50:56:af:d9:bb brd ff:ff:ff:ff:ff:ff
   inet 192.168.0.15/24 brd 192.255.255.255 scope global eth0
      valid_lft forever preferred_lft forever
   inet6 fe80::250:56ff:feaf:d9bb/64 scope link
      valid_lft forever preferred_lft forever
```

Now that you have all these go back to the device you are going to connect from and run

Ssh -R "publicIP":"Port":"localIP"

Replace public IP with the publicIP

Port with the Port(default ssh port is 22)

And LocalIP with the localIP(preferably static)