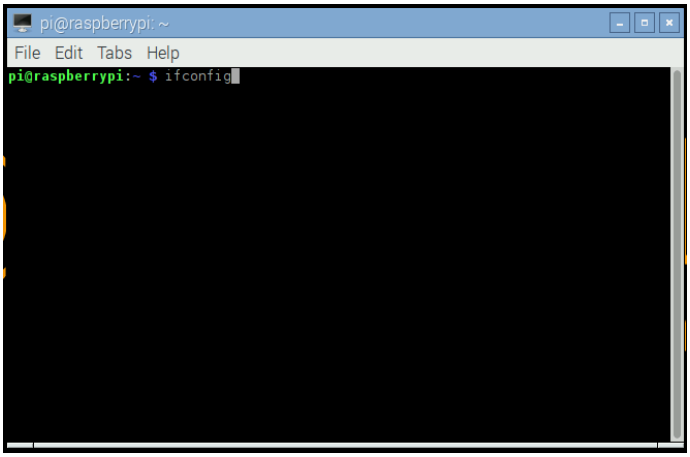
Tasklist Application – Configuration

1. Application network configuration

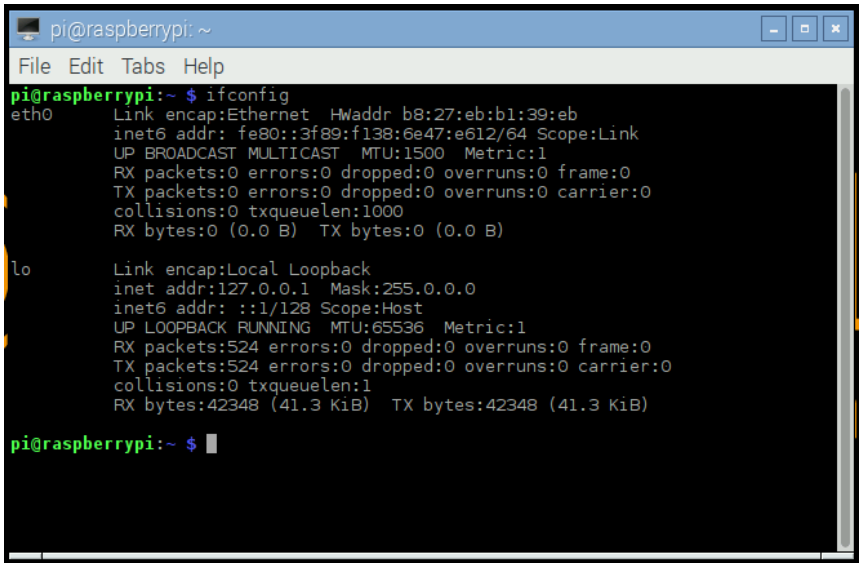
a. Setting up Static IP for Raspberry Pi in new router connection

- Open up Terminal

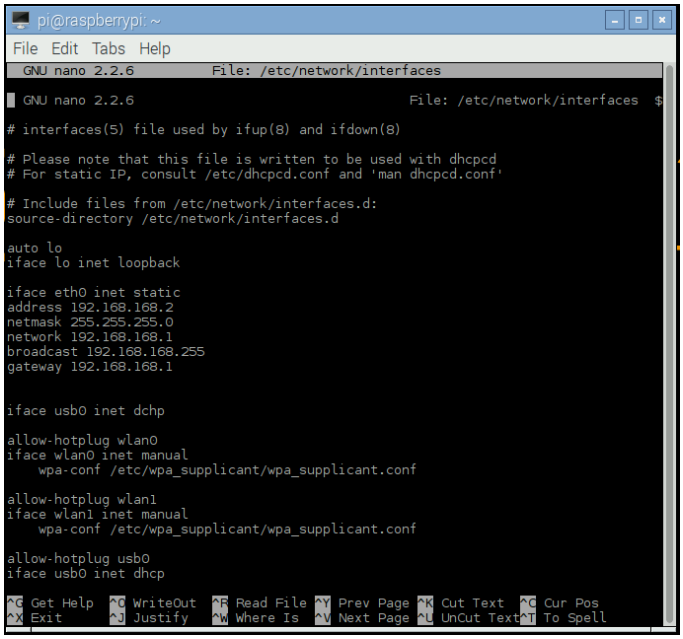
- Type ***ifconfig*** (it reveals all router information)



- From **eth0** note down:
    - **Inet addr** (current IP Address)
    - **Bcast** (broadcast IP Range)
    - **Mask** (Subnet Mask Address)

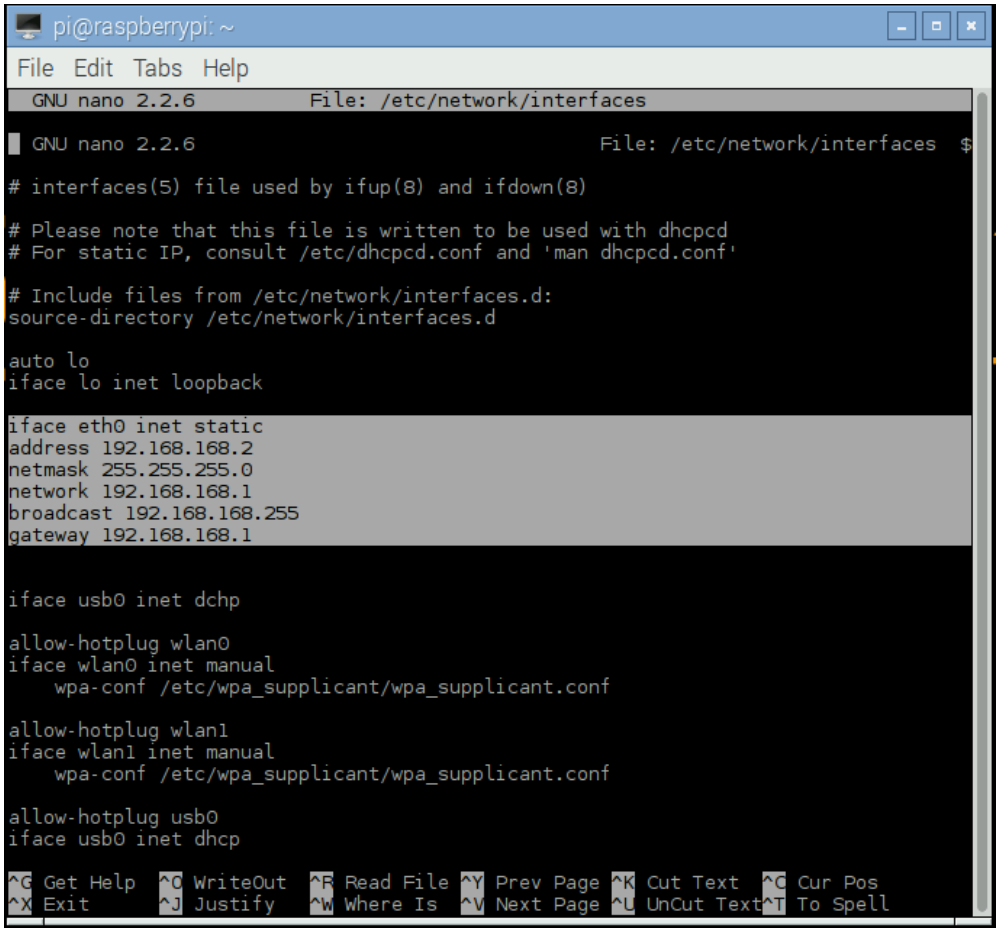


- Type ***netstat –nr*** (it reveals the gateway and destination)
- Note down:
    - **Gateway**
    - **Destination**
- Type ***sudo nano /etc/network/interfaces***



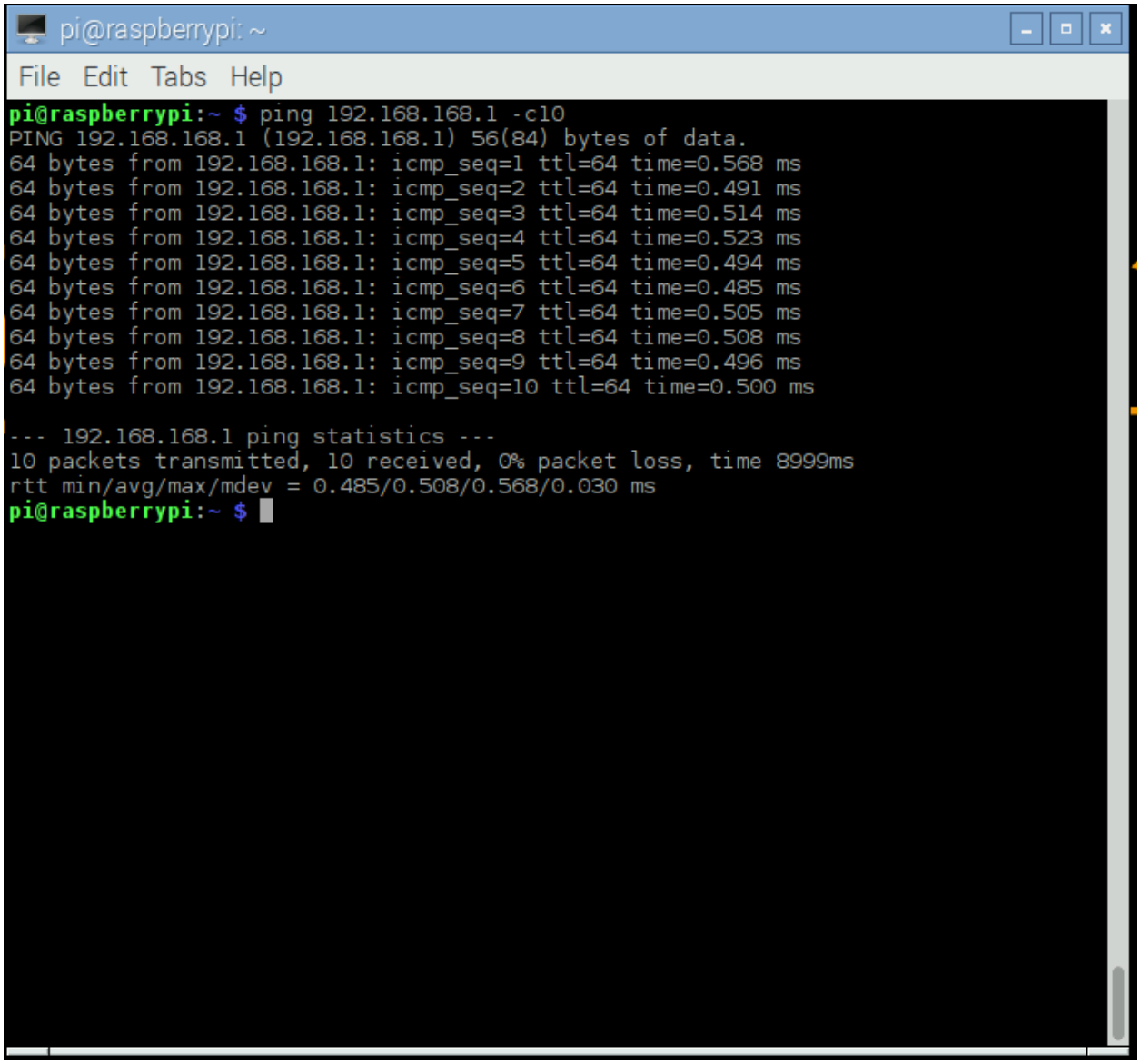
- If there is a line **iface eth0 inet static** , leave it that way, else (it might be **iface eth0 inet dhcp** / **iface eth0 inet manual**) change **dhcp** / **manual** to **static**
- Type down right below the previous line next lines:

  address 192.168.1.12 (<- this is an example, write the inet address noted before)
  netmask 255.255.255.0 (<- this is an example, write the mask noted before)
  network 192.168.168.1 (<- this is an example, write the destination address noted before)
  broadcast 192.168.0.255 (<- this is an example, write the broadcast IP range noted before)
  gateway 192.168.1.254 (<- this is an example, write the gateway address noted before)



- Press ***CTRL + O*** (save changes)
- Press ***CTRL + X*** (exit)
- Type down ***sudo rm /var/lib/dhcp/**** (to remove any existing leases)
- Type down ***sudo reboot***

- To test the connection type down ***ping <gate address noted before> -c 10***



b. Setting up the C# application for the new Raspberry Pi

- Open the TaskList App project in Visual Studio
- In Form2.cs go to the *fileTrans()* method

```
private void fileTrans()
{
    try
    {
        SessionOptions sessionOptions = new SessionOptions
        {
            Protocol = Protocol.Sftp,
            HostName = "192.168.168.2",
            UserName = "pi",
            Password = "raspberry",
            SshHostKeyFingerprint = "ssh-ed25519 256 87:dc:16:c5:84:23:87:8d:7a:d6:44:42:cb:4e:94:0f",
        };

        using (Session session = new Session())
        {

            session.Open(sessionOptions);
            TransferOptions objTrans = new TransferOptions();
            objTrans.TransferMode = TransferMode.Binary;


            session.PutFiles(@"D:\C#-aplicatie\TasksList\resource\TaskListWeb.html", "/home/pi/app/*", false, objTrans).Check();



        }
    }
    catch (Exception e)
    {

    }
}
```

- If the **inet addr** noted before is different from the **HostName** in the method, modify it

```
private void fileTrans()
{
    try
    {
        SessionOptions sessionOptions = new SessionOptions
        {
            Protocol = Protocol.Sftp,
            HostName = "192.168.168.2",
            UserName = "pi",
            Password = "raspberry",
            SshHostKeyFingerprint = "ssh-ed25519 256 87:dc:16:c5:84:23:87:8d:7a:d6:44:42:cb:4e:94:0f",
        };

        using (Session session = new Session())
        {

            session.Open(sessionOptions);
            TransferOptions objTrans = new TransferOptions();
            objTrans.TransferMode = TransferMode.Binary;


            session.PutFiles(@"D:\C#-aplicatie\TasksList\resource\TaskListWeb.html", "/home/pi/app/*", false, objTrans).Check();



        }
    }
    catch (Exception e)
    {

    }
}
```

- In the **session** instance change the location of the source file when calling the **PutFiles()** method, first parameter, and the destination of the file in Raspberry Pi's system, second parameter (IF NEEDED)
- Save the project
- In the Raspberry Upload app change the **HostName** parameter to the **inet addr** noted before parameter (IF NEEDED)

2. Python browser launching script

- Go to **File Manager** on the Raspberry Pi
- Go to ***/home/pi/app***
- Open the **TaskListWeb.py** file with Python 2 (IDLE)
- If needed change the current string in **url** variable with the location of the file you want to be opened at startup (WORKS WITH HTML FILES ONLY)