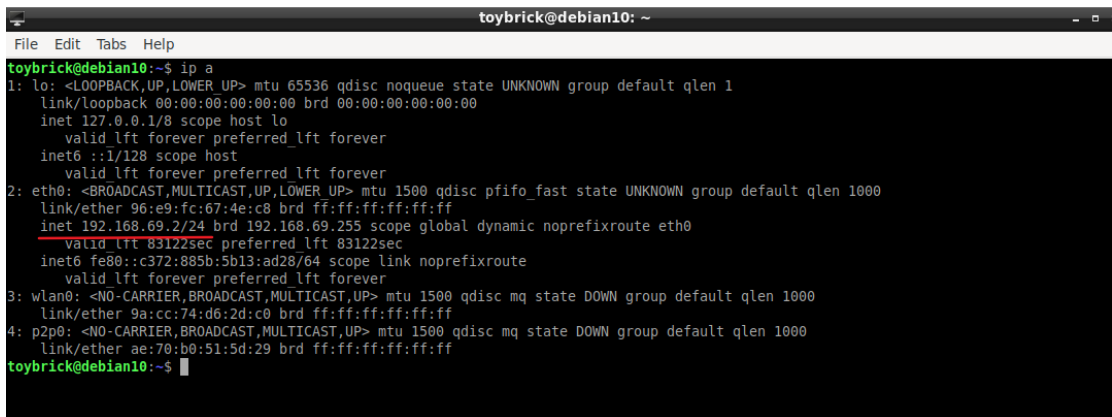


RK3399pro 通过 VScode ssh 远程调试

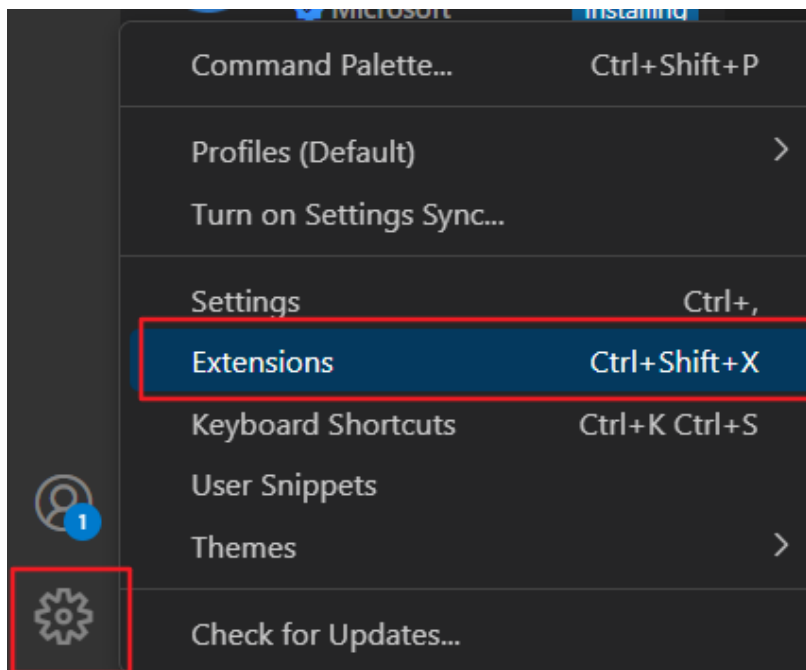
1. 查看开发板的 ip



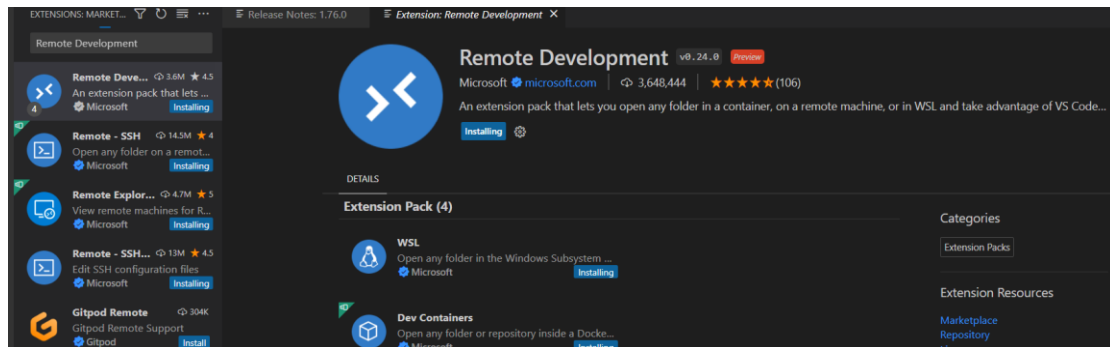
```
toybrick@debian10: ~  
File Edit Tabs Help  
toybrick@debian10:~$ ip a  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1  
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00  
    inet 127.0.0.1/8 scope host lo  
        valid_lft forever preferred_lft forever  
    inet6 ::1/128 scope host  
        valid_lft forever preferred_lft forever  
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UNKNOWN group default qlen 1000  
    link/ether 96:e9:fc:67:4e:c8 brd ff:ff:ff:ff:ff:ff  
    inet 192.168.69.2/24 brd 192.168.69.255 scope global dynamic noprefixroute eth0  
        valid_lft 83122sec preferred_lft 83122sec  
    inet6 fe80::c372:885b:5b13:ad28/64 scope link noprefixroute  
        valid_lft forever preferred_lft forever  
3: wlan0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc mq state DOWN group default qlen 1000  
    link/ether 9a:cc:74:d6:2d:c0 brd ff:ff:ff:ff:ff:ff  
4: p2p0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc mq state DOWN group default qlen 1000  
    link/ether ae:70:b0:51:5d:29 brd ff:ff:ff:ff:ff:ff  
toybrick@debian10:~$
```

2. 确定本机(win10)安装了 ssh 服务(ssh 客户端和 ssh 服务器)并开启, 这里本地 win10 使用 ssh 客户端, RK3399Pro 作 ssh 服务器。

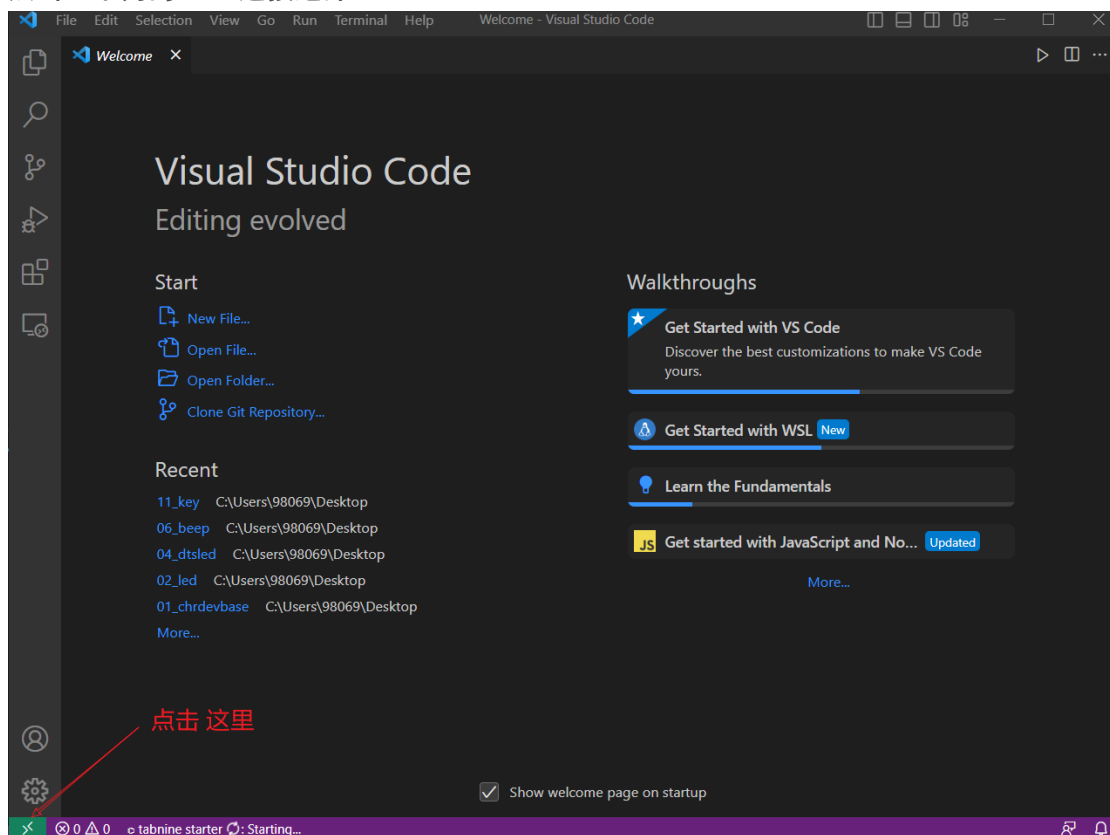
3. 在并在 vscode 中安装 ssh 插件。点击 vsode 左下角设置图标选择 Extension 选择。

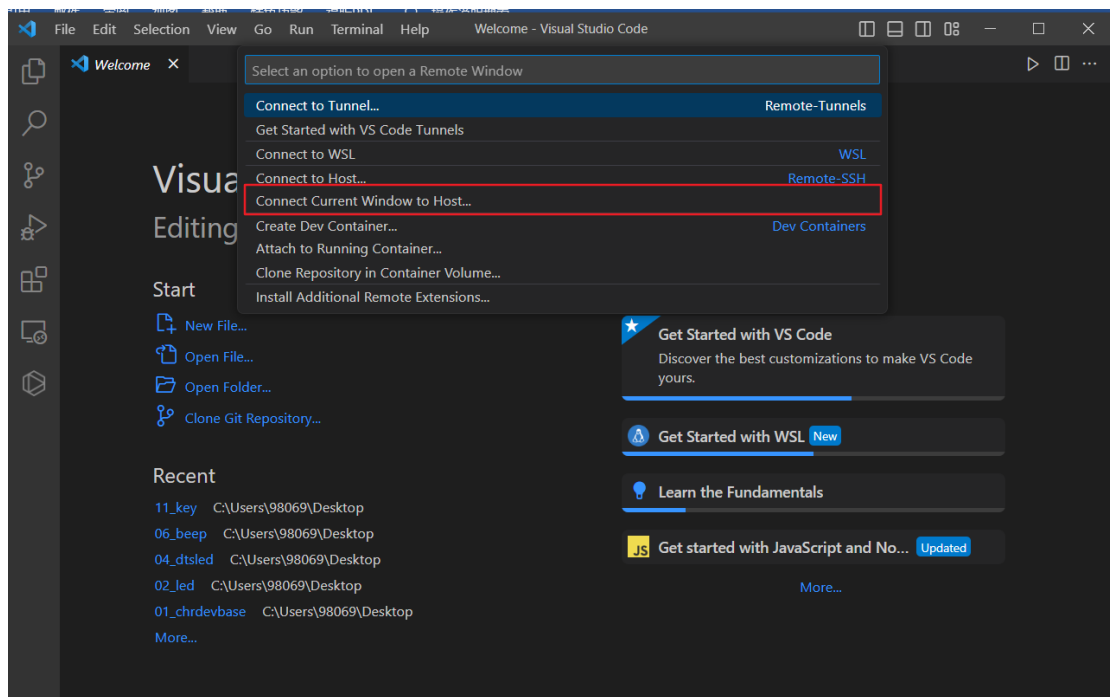


4. 搜索 Remote Development 并安装

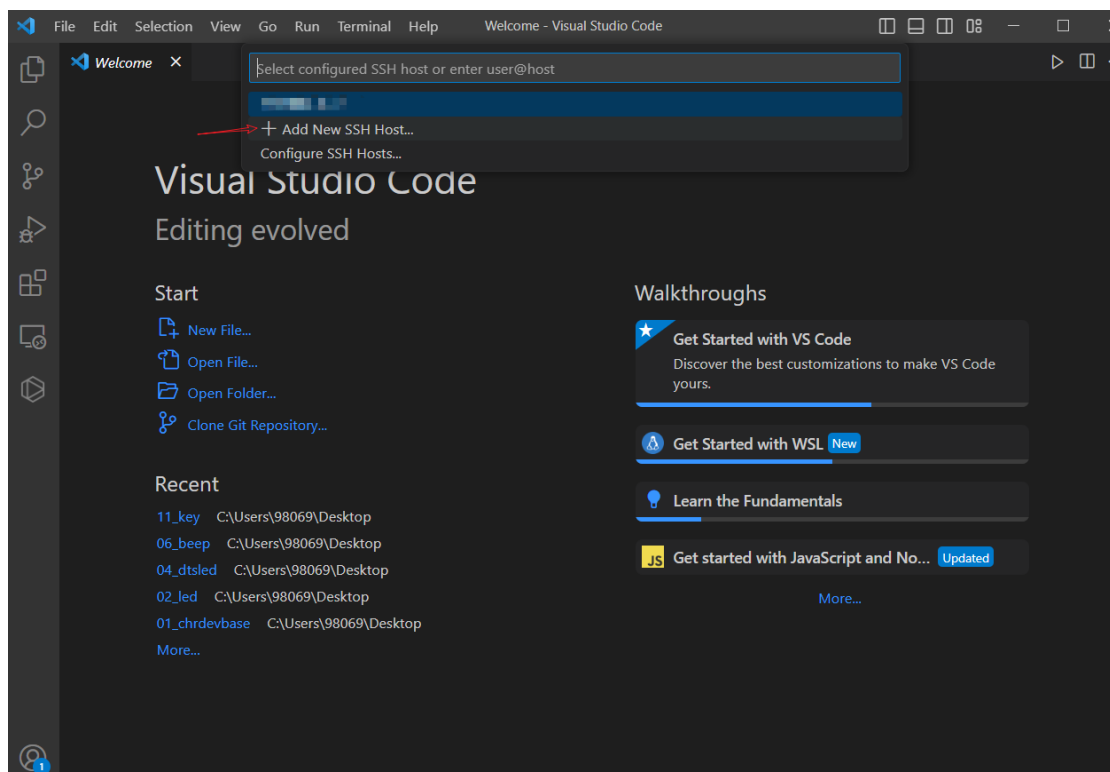


点击左下角的 ssh 连接选择：





5. 选择添加 ssh，按照格式填写用户名@IP 地址回车，等待输入密码即可。



连接过程中若出现下列问题：

```
> toybrick@192.168.69.2's password:
[14:41:10.076] Showing password prompt
[14:41:10.563] Got password response
[14:41:10.563] "install" wrote data to terminal: ""
[14:41:10.577] >
[14:41:10.596] > toybrick@192.168.69.2: Permission denied (publickey,password).
> 过程试图写入的管道不存在。
>
[14:41:11.926] "install" terminal command done
[14:41:11.927] Install terminal quit with output: 过程试图写入的管道不存在。
[14:41:11.927] Received install output: 过程试图写入的管道不存在。
[14:41:11.927] Failed to parse remote port from server output
[14:41:11.929] Resolver error: Error:
    at m.Create (c:\Users\98069\.vscode\extensions\ms-vscode-remote.remote-ssh-0.98.0\out\extension.js:1:584388)
    at t.handleInstallOutput (c:\Users\98069\.vscode\extensions\ms-vscode-remote.remote-ssh-0.98.0\out\extension.js:1:582948)
    at t.tryInstall (c:\Users\98069\.vscode\extensions\ms-vscode-remote.remote-ssh-0.98.0\out\extension.js:1:681793)
    at async c:\Users\98069\.vscode\extensions\ms-vscode-remote.remote-ssh-0.98.0\out\extension.js:1:644041
    at async t.withShowDetailsEvent (c:\Users\98069\.vscode\extensions\ms-vscode-remote.remote-ssh-0.98.0\out\extension.js:1:647359)
    at async t.resolve (c:\Users\98069\.vscode\extensions\ms-vscode-remote.remote-ssh-0.98.0\out\extension.js:1:645091)
    at async c:\Users\98069\.vscode\extensions\ms-vscode-remote.remote-ssh-0.98.0\out\extension.js:1:720839
[14:41:11.948] -----
```

在 RK3399Pro 中进行 sshd 配置文件的修改：

执行：

```
sudo vim /etc/ssh/sshd_config
```

打开配置文件后，找到 PasswordAuthentication yes 选项，将前面的#去掉即可。我这里的配置文件默认是 yes，若是 no，先修改为 yes 再取消注释。保存退出。

```
#MaxSessions 10

#PubkeyAuthentication yes

# Expect .ssh/authorized_keys2 to be disregarded by default in future.
#AuthorizedKeysFile .ssh/authorized_keys .ssh/authorized_keys2

#AuthorizedPrincipalsFile none

#AuthorizedKeysCommand none
#AuthorizedKeysCommandUser nobody

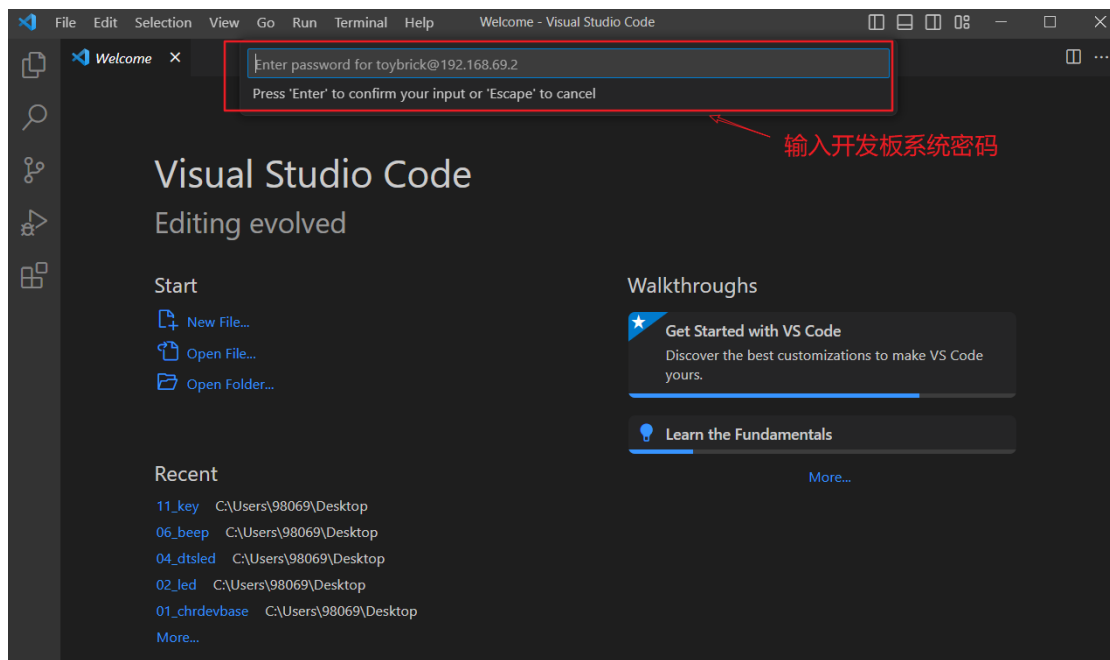
# For this to work you will also need host keys in /etc/ssh/ssh_known_hosts
#HostbasedAuthentication no
# Change to yes if you don't trust ~/.ssh/known_hosts for
# HostbasedAuthentication
#IgnoreUserKnownHosts no
# Don't read the user's ~/.rhosts and ~/.shosts files
#IgnoreRhosts yes

# To disable tunneled clear text passwords, change to no here!
PasswordAuthentication yes
#PermitEmptyPasswords no

# Change to yes to enable challenge-response passwords (beware issues with
# some PAM modules and threads)
ChallengeResponseAuthentication no

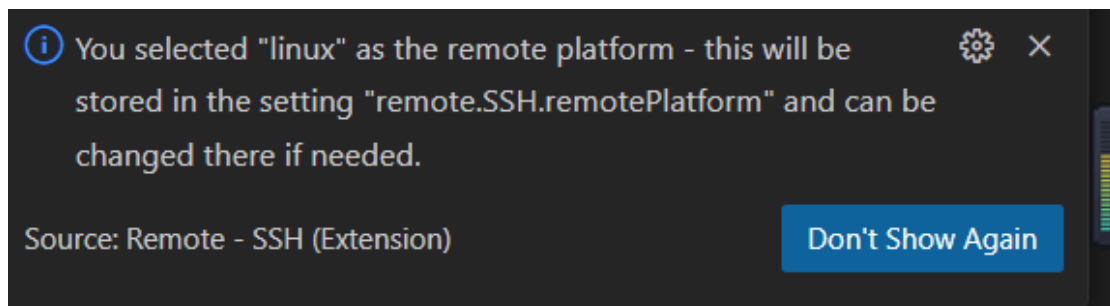
# Kerberos options
```

6. 重新连接，直至弹出提示输入密码：



7. 连接成功

页面右下角显示信息



vscode 中进入 RK3399Pro 终端显示,,上面工具栏可选择文件代码进行编辑调试:

