一、项目部署

参考博客：

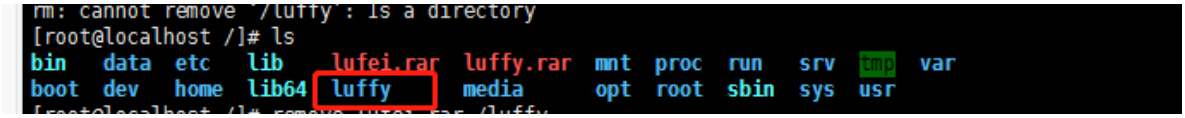
```
https://www.cnblogs.com/lvye001/p/10631276.html
```

第一步：上传项目到centos

```
rz  然后选择压缩包上传
```

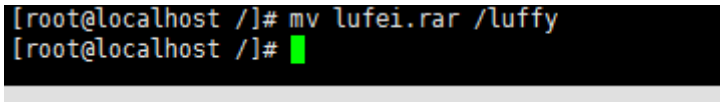
第二步：创建luffy文件夹

```
mkdir luffy
```



001、将路飞的项目前后端的项目压缩文件移动到luffy文件夹下

```
mv lufei.rar /luffy
mv luffy.rar /luffy
```

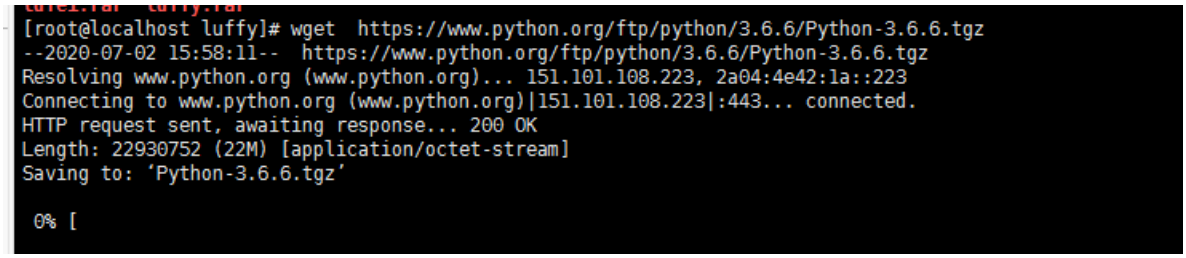


第三步：安装python3，在centos界面使用python3说明安装成功

```

```

```
    wget  https://www.python.org/ftp/python/3.6.6/Python-3.6.6.tgz
```




```
python
```

002、解压python压缩文件

```
tar -zxvf Python-3.6.6.tgz
```

```
root@localhost luffy]# ls
ufei.rar  luffy.rar  Python-3.6.6.tgz
root@localhost luffy]# tar -zxvf Python-3.6.6.tgz
```

解压完成

```
Python-3.6.6/Objects/floatobject.c
Python-3.6.6/Objects/clinic/
Python-3.6.6/Objects/clinic/unicodeobject.c.h
Python-3.6.6/Objects/clinic/bytearrayobject.c.h
Python-3.6.6/Objects/clinic/bytesobject.c.h
Python-3.6.6/Objects/clinic/dictobject.c.h
Python-3.6.6/Objects/bytearrayobject.c
Python-3.6.6/Objects/typeobject.c
Python-3.6.6/Objects/lnotab_notes.txt
Python-3.6.6/Objects/methodobject.c
Python-3.6.6/Objects/tupleobject.c
Python-3.6.6/Objects/obmalloc.c
Python-3.6.6/Objects/object.c
Python-3.6.6/Objects/abstract.c
Python-3.6.6/Objects/listobject.c
Python-3.6.6/Objects/bytes_methods.c
Python-3.6.6/Objects/dictnotes.txt
Python-3.6.6/Objects/typeslots.inc
[root@localhost luffy]#
```

003、进入解压的python文件夹

```
cd Python-3.6.6
```

```
root@localhost luffy]# ls
ufei.rar  luffy.rar  Python-3.6.6  Python-3.6.6.tgz
root@localhost luffy]# cd Python-3.6.6/
root@localhost Python-3.6.6]#
```

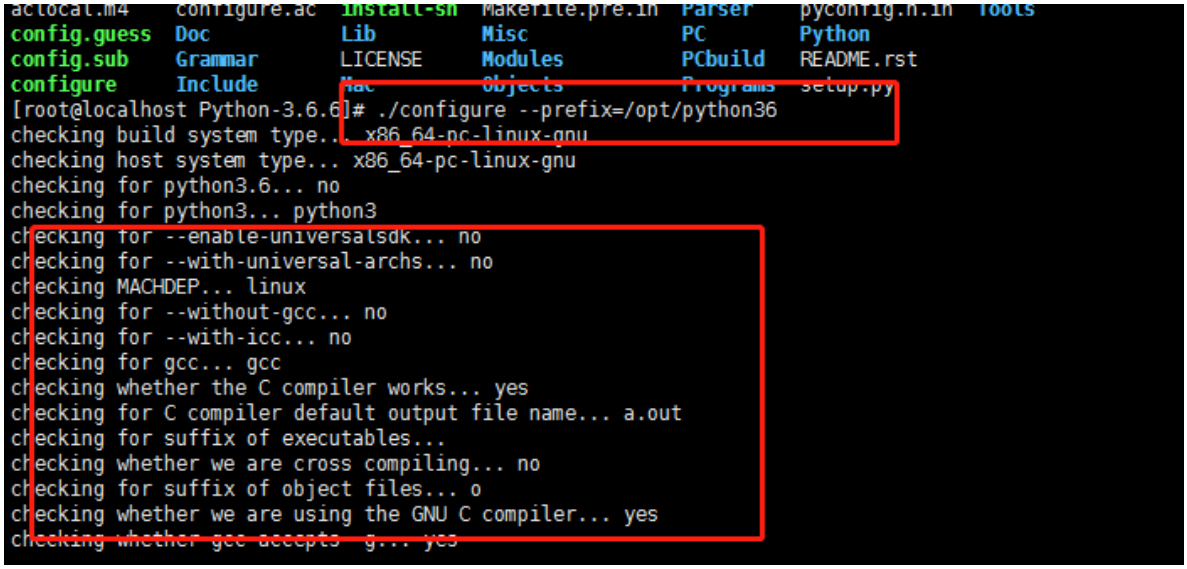
解压后的文件

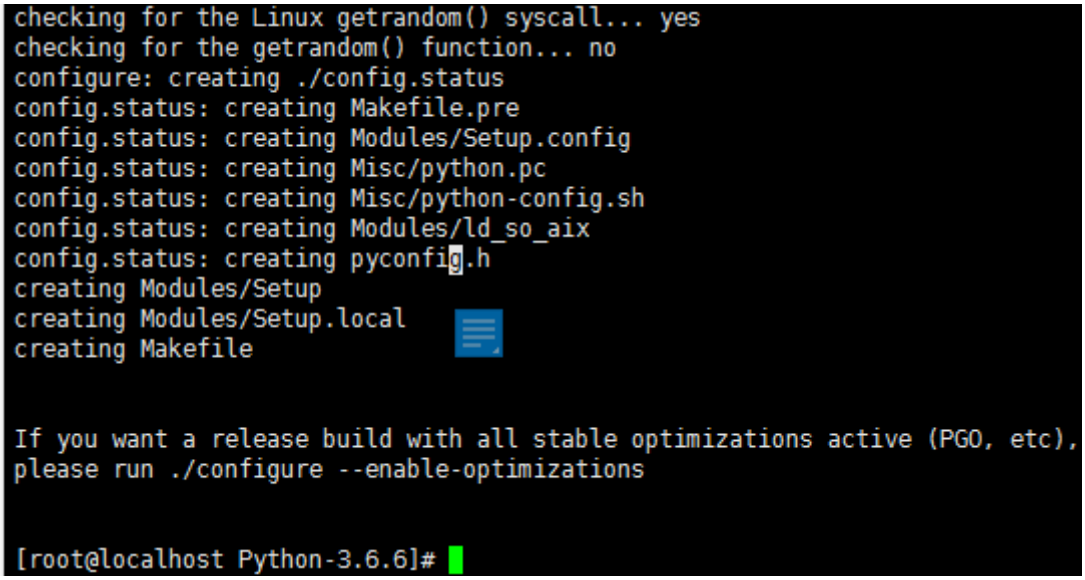
```
ls
```

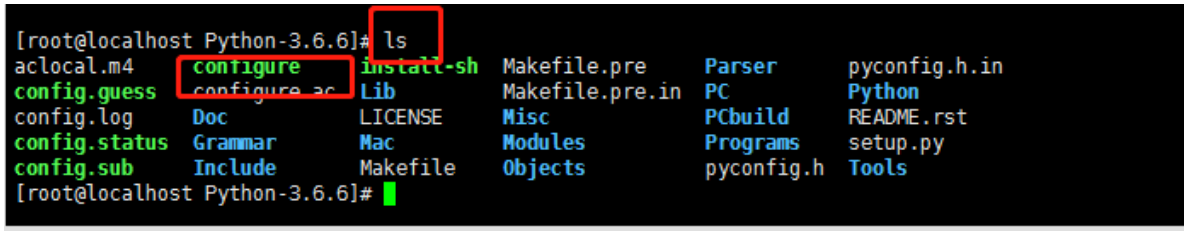
```
root@localhost Python-3.6.6]# ls
aclocal.m4    configure.ac  install-sh  Makefile.pre.in  Parser     pyconfig.h.in  Tools
config.guess  Doc           Lib         Misc             PC         Python
config.sub    Grammar       LICENSE     Modules          PCbuild    README.rst
configure     Include       Mac         Objects          Programs   setup.py
root@localhost Python-3.6.6]#
```

004、编译安装，先指定安装目录为指定安装目录为/opt/python36

```
./configure --prefix=/opt/python36   # 指定安装目录为/opt/python36
```







005、编译

```
make    # 相当于把源码包里面的代码编译成linux服务器可以识别的代码
```

006、5编译安装,此步才会最终生成 /opt/python36/

```
make install
```

```
5 6 步骤可以合并:
make && make install  # 先进行make，执行完成之后，才开始执行make install
```

```
        (cd /opt/python36/bin; ln -s python3.6-32 python3-32) \
fi
rm -f /opt/python36/share/man/man1/python3.1
(cd /opt/python36/share/man/man1; ln -s python3.6.1 python3.1)
if test "xupgrade" != "xno"  ; then \
        case upgrade in \
                upgrade) ensurepip="--upgrade" ;; \
                install|*) ensurepip="" ;; \
        esac; \
         ./python -E -m ensurepip \
                $ensurepip --root=/ ; \
fi
Looking in links: /tmp/tmp24_xh9ga
Collecting setuptools
Collecting pip
Installing collected packages: setuptools, pip
Successfully installed pip-10.0.1 setuptools-39.0.1
[root@localhost Python-3.6.6]#
```

此时查看/opt/

```
cd /opt  # 可以看到出现了python36的文件夹
```

```
rh
[root@localhost opt]# ls
python36  rh
[root@localhost opt]#
```

输入python3，说明安装成功了

```
[root@localhost opt]# python3
Python 3.7.2 (default, Jun 18 2020, 17:35:42)
[GCC 4.8.5 20150623 (Red Hat 4.8.5-36)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

也可能出现：

```
-bash: python3: command not found
那就需要安装各种依赖包，百度一下就能找到,然后再重新编译安装
```

```
[root@VM-0-14-centos python36]# ls
bin  include  lib  share
[root@VM-0-14-centos python36]# ls
bin  include  lib  share
[root@VM-0-14-centos python36]# cd /root
[root@VM-0-14-centos ~]# ls
[root@VM-0-14-centos ~]# cd /
[root@VM-0-14-centos /]# python3
-bash: python3: command not found
[root@VM-0-14-centos /]#
ssh://root@134.175.176.119:22
```

007、将安装路径添加到centos的path下

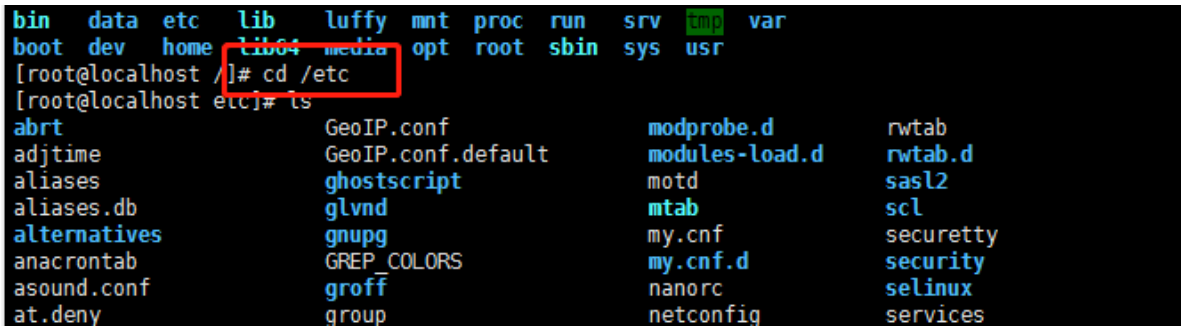
```
~/.bash_profile  # 这个是用户环境变量配置文件
/etc/profile  # 系统环境变量配置文件
```

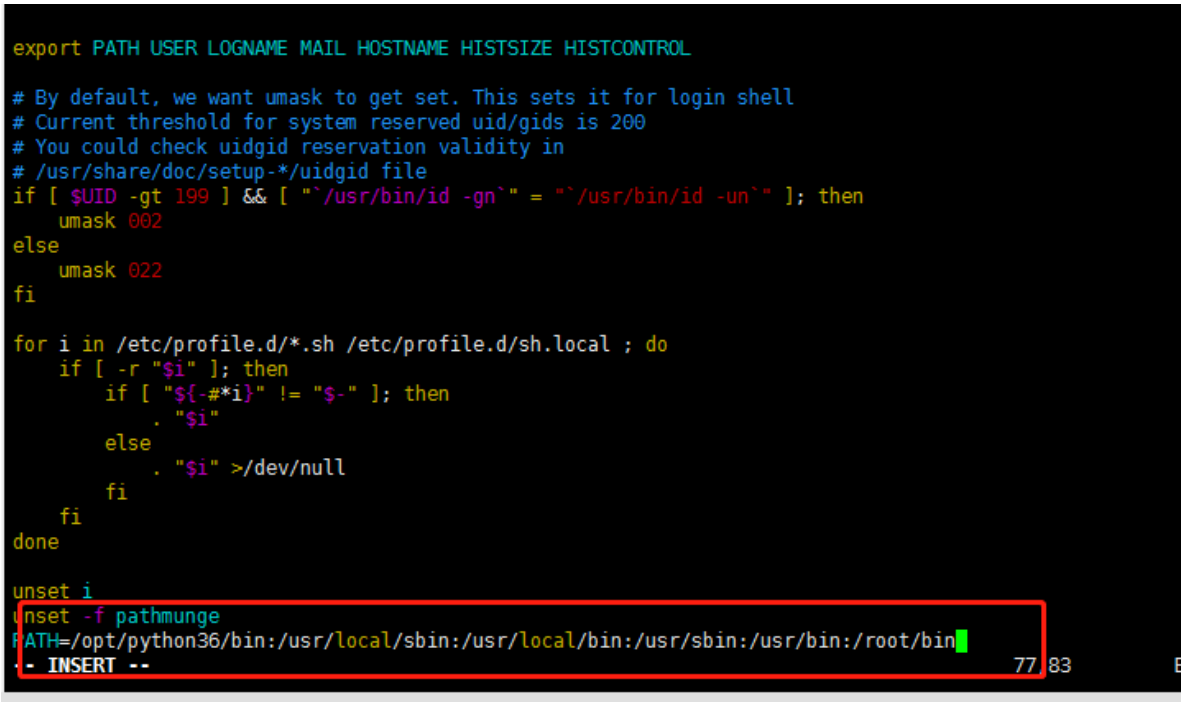
修改/etc/profile系统环境变量配置文件，

```
cd /etc
vim profile
```

添加以下内容

```
export
PATH=$path:/opt/python36/bin:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/
root/bin
```





注意： 一定要将python3的目录放在第一位

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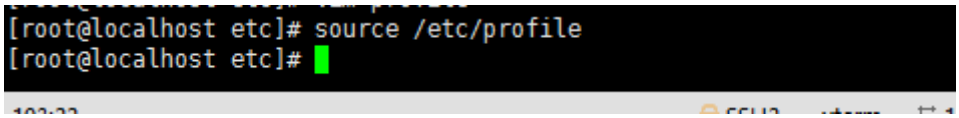
-

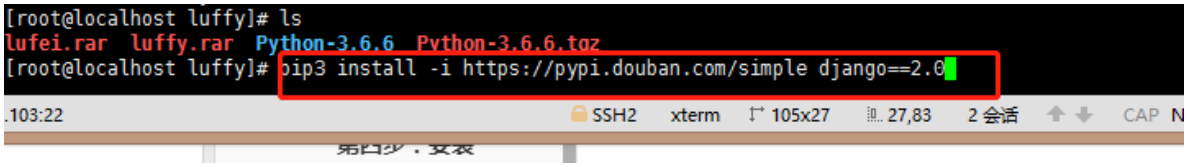
为了永久生效path设置，需要,重载配置文件/etc/profile

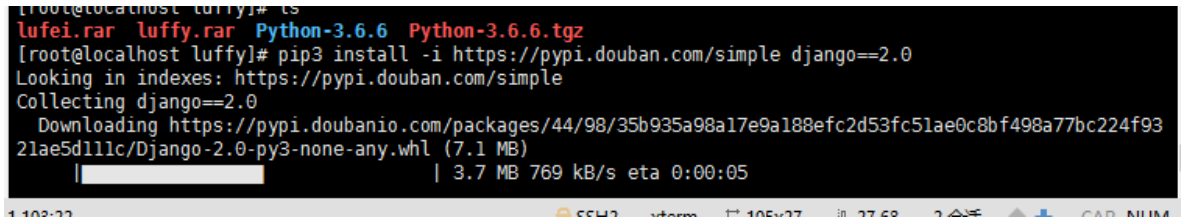
```
source /etc/profile
```

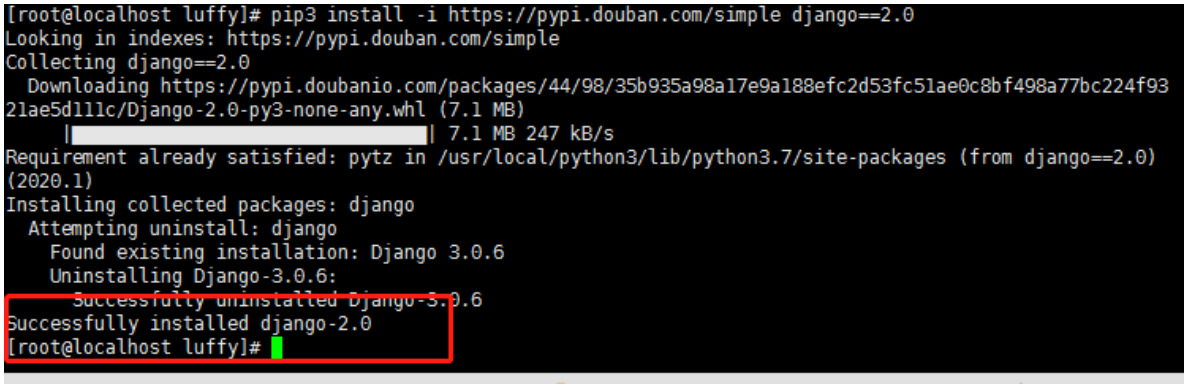


第四步：安装Django，这里安装的是django2.0

```
pip3 install -i https://pypi.douban.com/simple django==2.0
```







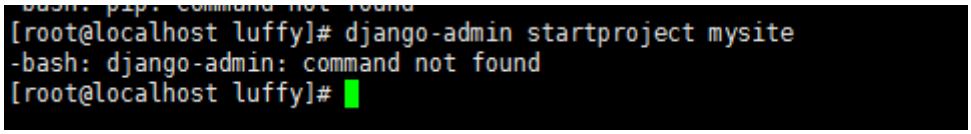
pip3 list,可能需要升级pip

```
pip3 install --upgrade pip
```

安装了python3，但是centos 里面是默认安装的python2.在python3种我安装了django，但是使用

```
django-admin startproject mysite
```

提示命令行不存在，这个时候可能是python的路径有问题，上名的路径我是又修改了的，所以应该不会再出现这个问题



pip3 list

```
[root@localhost luffy]# pip3 list
Package            Version
------------------ --------
appdirs            1.4.4
asgiref            3.2.7
beautifulsoup4     4.9.1
bs4                0.0.1
distlib            0.3.0
Django             2.0
filelock           3.0.12
importlib-metadata 1.6.1
mysqlclient        1.4.6
Pillow             7.1.2
pip                20.1.1
PyMySQL            0.9.3
pytz               2020.1
setuptools         40.6.2
six                1.15.0
soupsieve          2.0.1
sqlparse           0.3.1
uWSGI              2.0.19.1
virtualenv         20.0.23
zipp               3.1.0
```

为了验证django是否安装成功了，我在 /opt 目录下新建一个djang项目：

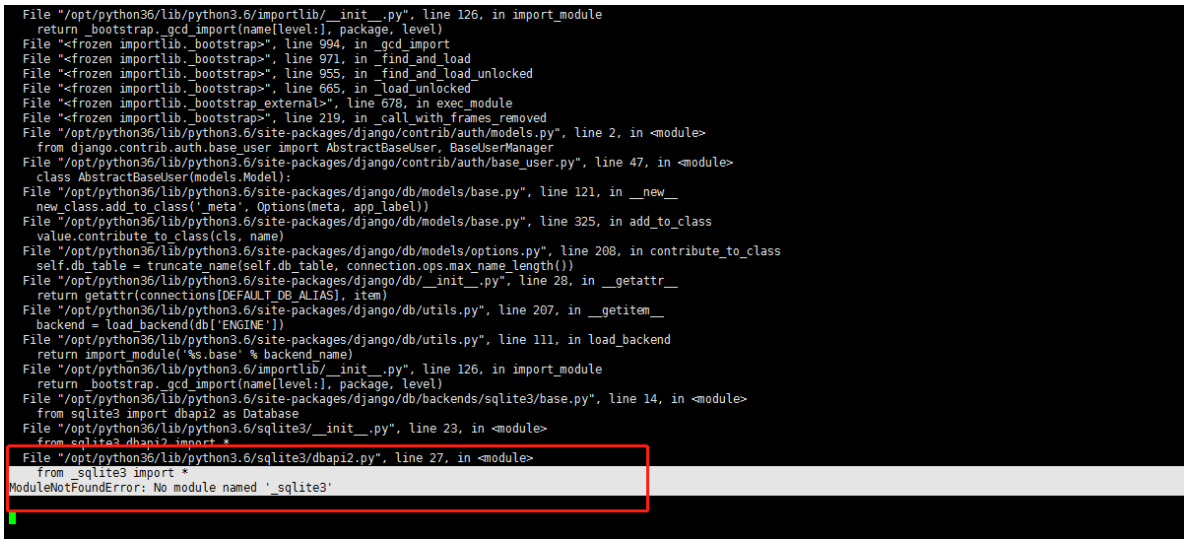
在root/目录的下的opt目录下新建一个django的项目，然后启动该项目。

```
[root@tom opt]# django-admin startproject mysite
[root@tom opt]# ls
mysite  python36  rh
[root@tom opt]# cd mysite
[root@tom mysite]# ls
manage.py  mysite
# 启动一定要指定0.0.0.0：8000 同时要修改settings.py文件的host 和关闭防火墙

关闭防火墙 ：systemctl stop firewalld.service

[root@tom mysite]# python3 manage.py runserver 0.0.0.0:8000
```

```
[root@localhost opt]# ls
python36  rh
[root@localhost opt]# django-admin startproject mysite
[root@localhost opt]# ls
mysite  python36  rh
[root@localhost opt]# ls
mysite  python36  rh
[root@localhost opt]# cd mysite/
[root@localhost mysite]# ls
manage.py  mysite
[root@localhost mysite]# python3 manage.py runserver
Performing system checks...

System check identified no issues (0 silenced).

You have 14 unapplied migration(s). Your project may not work properly until you a
 app(s): admin, auth, contenttypes, sessions.
Run 'python manage.py migrate' to apply them.

July 03, 2020 - 01:22:30
Django version 2.0, using settings 'mysite.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
```

启动时还报错：

```
    from _sqlite3 import *
ModuleNotFoundError: No module named '_sqlite3'
```



出现原因：可能是python版本问题，因为我装了python3，将其设置为默认解释其了

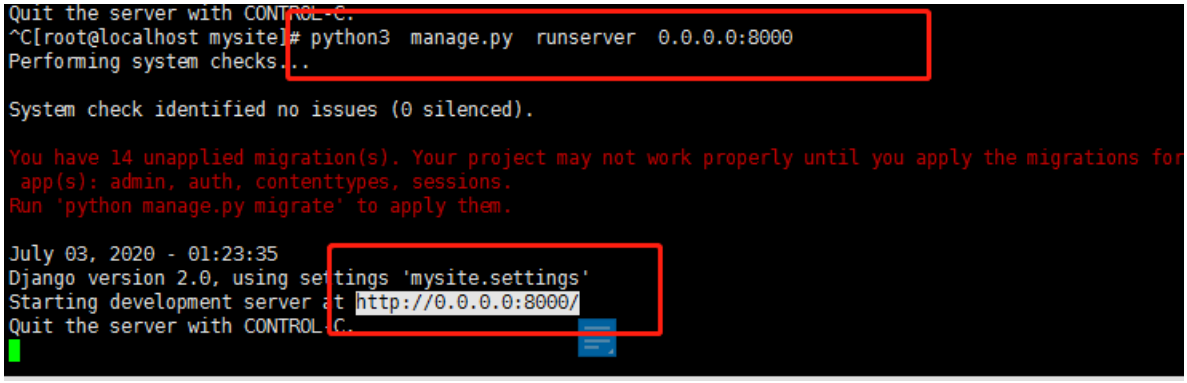
```
我重新默认了解释器为python2 并进行安装  yum install sqlite-devel
```

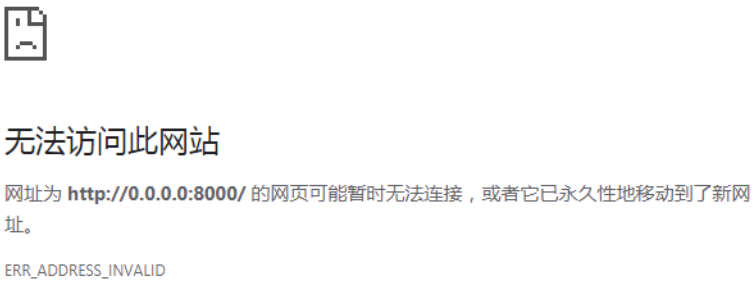
```
File "/usr/libexec/urlgrabber-ext-down", line 28
https://blog.csdn.net/qq_34272964/article/details/87178724

出现上面 问题是我在安装python3.7版本，让python2和python3共存，没有修改/usr/libexec/urlgrabber-ext-down文件，只需要将#! /usr/bin/python2 修改成 #! /usr/bin/python2.7即可。
```

按照提示的 网站进行用浏览器进行访问，发现访问不到：

于是我们给其指定一个ip

python3 manage.py runserver 0.0.0.0:8000 运行后



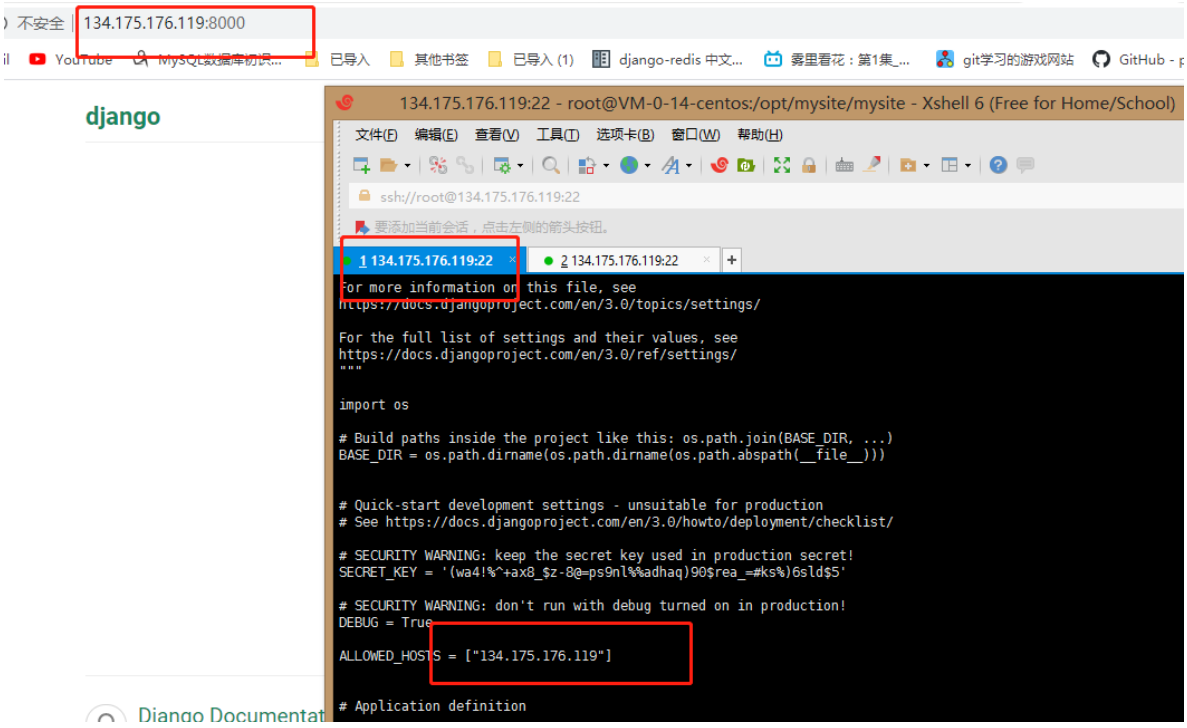


然后再访问这个显示的地址 本机的ip加上指定的端口号 http://192.168.130.68:8000/

```
127.0.0.1 本机环回地址
192.168.12.56 本机对外IP地址
0.0.0.0 本机环回地址 127.0.0.1加上192.168.12.56
```

发现还是访问不到，出现错误的原因是：Django项目的settings下需要设置host:

如果是在线的腾讯云服务器，则需要些服务器的ip




```
^C[root@localhost mysite]# ls
db.sqlite3  manage.py  mysite
[root@localhost mysite]# cd mysite/
[root@localhost mysite]# ls
__init__.py  __pycache__  settings.py  urls.py  wsgi.py
[root@localhost mysite]#
```

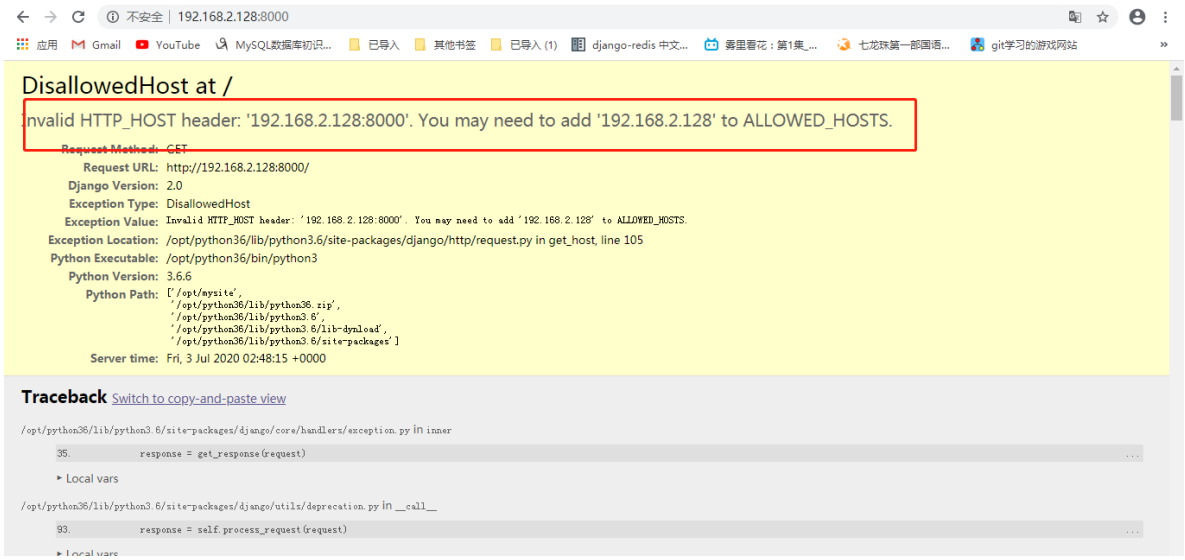
```
# SECURITY WARNING: don't run with debug tu
DEBUG = True

ALLOWED_HOSTS = ["*"]


# Application definition
```

启动：

```
[root@localhost mysite]# python3 manage.py runserver 0.0.0.0:8000
Performing system checks...

System check identified no issues (0 silenced).

You have 14 unapplied migration(s). Your project may not work properly until you appl
 app(s): admin, auth, contenttypes, sessions.
Run 'python manage.py migrate' to apply them.

July 03, 2020 - 01:30:42
Django version 2.0, using settings 'mysite.settings'
Starting development server at http://0.0.0.0:8000/
Quit the server with CONTROL-C.
```

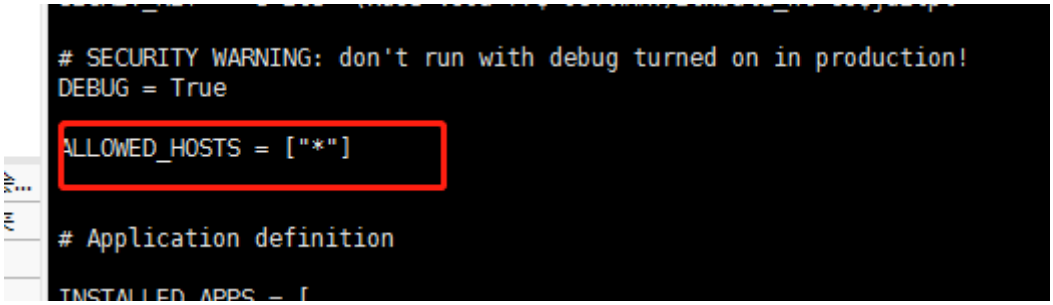
然后再使用本机地址加上指定端口8000进行访问，发现事实访问不到，此时可能防火墙还未关闭，关闭防火墙，

关闭防火墙后再重启：出现下面的页面，说明host文件忘记添加了

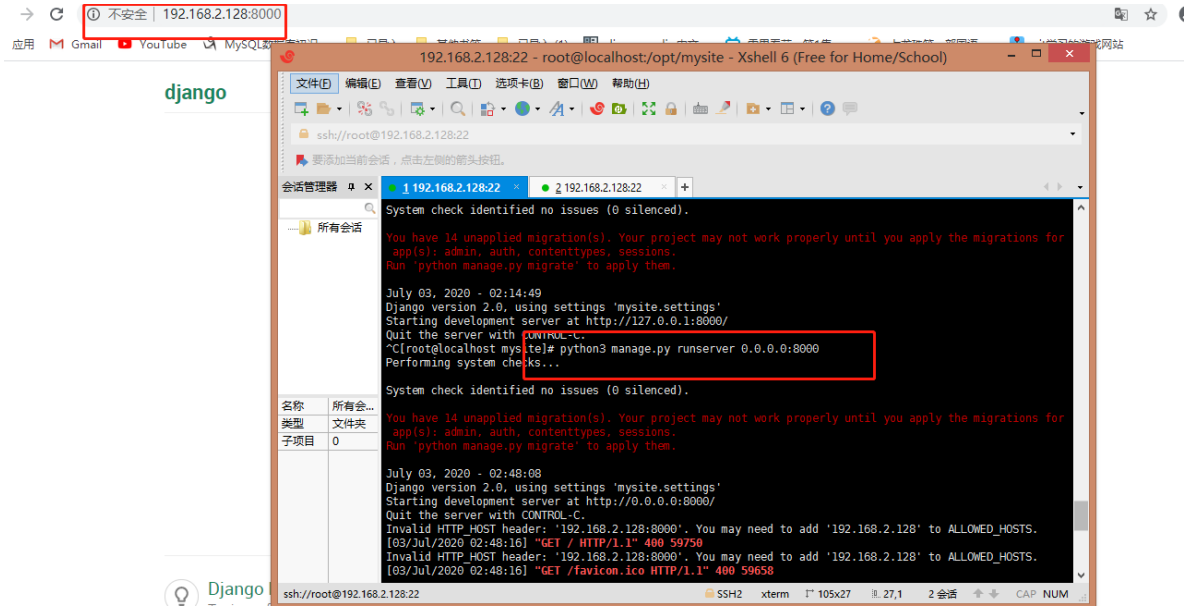


> 之前我已经设置了，为vmware为NAT模式，
> 然后关闭防火墙：`systemctl stop firewalld.service`

此时再检查setttins.py文件的host

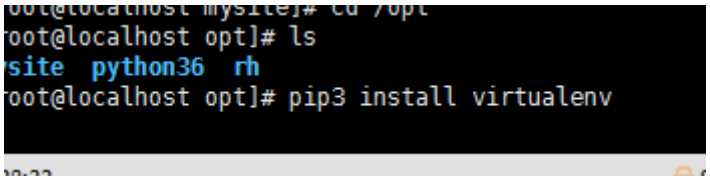


再次重启运行：可以运行了



第五步：安装mkvirtualenv 虚拟环境

```
cd /opt   # opt目录就是存储安装包的
pip3 install virtualenv
pip3 install --upgrade virtualenv==16.7.9 # 指定安装这个版本，不然会报错 package。。
```



```
oot@localhost opt]# pip3 install virtualenv
llecting virtualenv
Downloading virtualenv-20.0.25-py2.py3-none-any.whl (4.7 MB)
    |████████████████████████████████| 4.7 MB 128 kB/s
llecting distlib<1,>=0.3.0
Downloading distlib-0.3.1-py2.py3-none-any.whl (335 kB)
    |████████████████████████████████| 335 kB 156 kB/s
llecting importlib-metadata<2,>=0.12; python_version < "3.8"
Downloading importlib_metadata-1.7.0-py2.py3-none-any.whl (31 kB)
llecting importlib-resources>=1.0; python_version < "3.7"
Downloading importlib_resources-3.0.0-py2.py3-none-any.whl (23 kB)
llecting filelock<4,>=3.0.0
Using cached filelock-3.0.12-py3-none-any.whl (7.6 kB)
llecting appdirs<2,>=1.4.3
Using cached appdirs-1.4.4-py2.py3-none-any.whl (9.6 kB)
llecting six<2,>=1.9.0
Using cached six-1.15.0-py2.py3-none-any.whl (10 kB)
llecting zipp>=0.5
Using cached zipp-3.1.0-py3-none-any.whl (4.9 kB)
stalling collected packages: distlib, zipp, importlib-metadata, importlib-resource
ix, virtualenv
ccessfully installed appdirs-1.4.4 distlib-0.3.1 filelock-3.0.12 importlib-metadat
rces-3.0.0 six-1.15.0 virtualenv-20.0.25 zipp-3.1.0
oot@localhost opt]# ls
site  python36  rh
oot@localhost opt]#
```

此时 我在 root目录下创建一个文件夹 Myproject

```
cd /
mkdir Myproject
```

然后：

```
virtualenv --no-site-packages --python=/opt/python36/bin/python3  env01  #得到独立第三方包的环境，并且指定解释器是python3
```

报错：

```
virtualenv: error: unrecognized arguments: --no-site-packages
SystemExit: 2
```

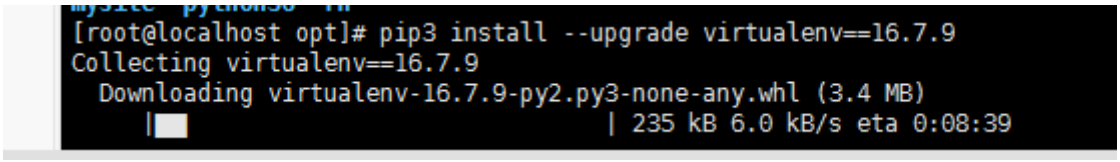
```
[root@localhost Myproject]# virtualenv --no-site-packages --python=/opt/python36/bin/python3 qishi2_dj20
usage: virtualenv [--version] [--with-traceback] [-v | -q] [--app-data APP_DATA] [--reset-app-data] [--up
grade-embed-wheels] [--discovery {builtin}] [-p py] [--creator {builtin,cpython3-posix,venv}] [--seeder {
app-data,pip}] [--no-seed]
                  [--activators comma_sep_list] [--clear] [--system-site-packages] [--symlinks | --copies
] [--no-download | --download] [--extra-search-dir d [d ...]] [--pip version] [--setuptools version] [--w
heel version] [--no-pip]
                  [--no-setuptools] [--no-wheel] [--no-periodic-update] [--symlink-app-data] [--prompt pr
ompt] [-h]
                  dest
virtualenv: error: unrecognized arguments: --no-site-packages
SystemExit: 2
[root@localhost Myproject]# virtualenv --no-site-packages --python=/opt/python36/bin/python3  env01
usage: virtualenv [--version] [--with-traceback] [-v | -q] [--app-data APP_DATA] [--reset-app-data] [--up
grade-embed-wheels] [--discovery {builtin}] [-p py] [--creator {builtin,cpython3-posix,venv}] [--seeder {
app-data,pip}] [--no-seed]
                  [--activators comma_sep_list] [--clear] [--system-site-packages] [--symlinks | --copies
] [--no-download | --download] [--extra-search-dir d [d ...]] [--pip version] [--setuptools version] [--w
heel version] [--no-pip]
                  [--no-setuptools] [--no-wheel] [--no-periodic-update] [--symlink-app-data] [--prompt pr
ompt] [-h]
                  dest
virtualenv: error: unrecognized arguments: --no-site-packages
SystemExit: 2
[root@localhost Myproject]#
```

原因：其实就死版本问题

```
--no-site-packages    没有这个参数，是virtualenv版本问题
```

安装指定版本：

```
pip3 install --upgrade virtualenv==16.7.9
```

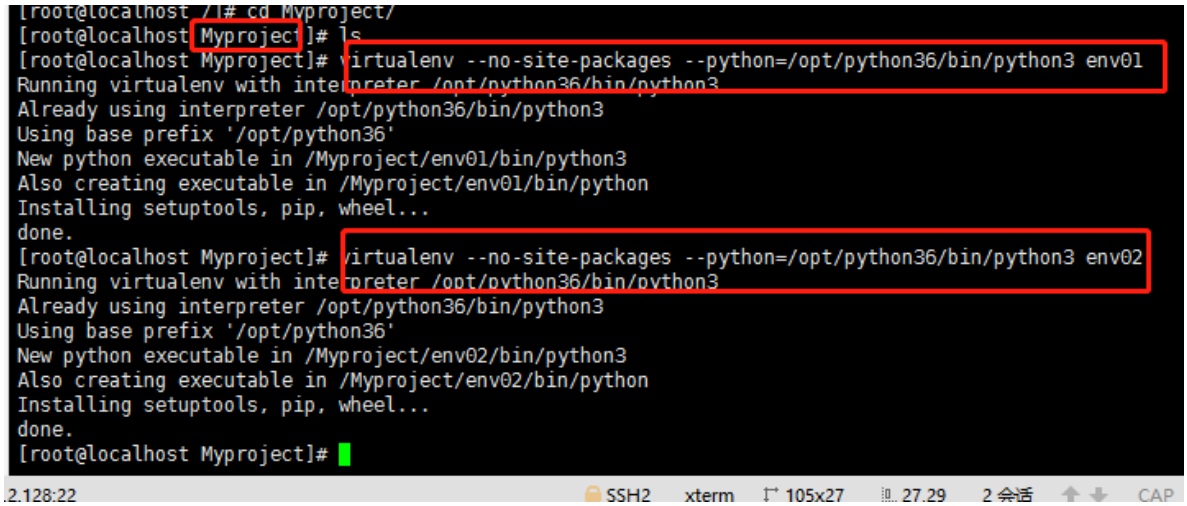


然后进行虚拟机创建

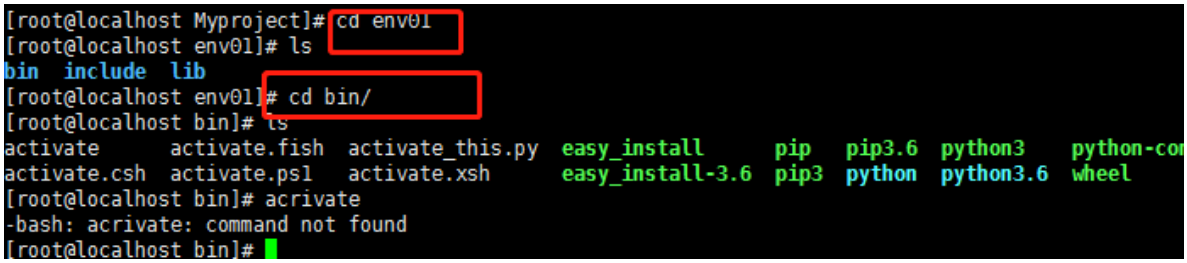
```
进入创建的Myproject 目录
cd  Myproject
```

创建虚拟环境：

进入创建的Myproject目录下，可以看到之前创建的两个虚拟环境

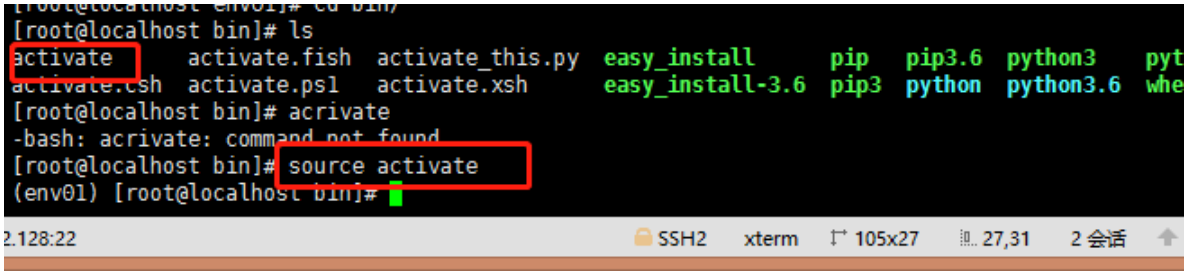


己想进入的那个虚拟环境



然后执行source activate 进入虚拟环境，可以看到命令行之前有虚拟环境的名称表示进入虚拟环了。

```
cd /bin
source activate  # 启动这个虚拟环境
```




```
这个是是上面的简写：
source venv/bin/activate
```

source venv/bin/activate#此时进入虚拟环境(venv)Myproject

退出venv环境

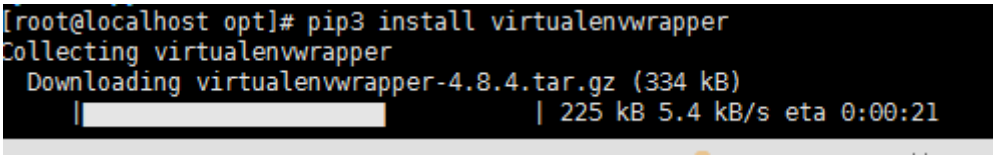
```
deactivate
```

在虚拟环境下安装python包，使用pip3

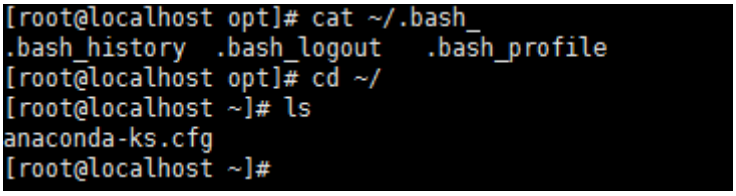
第六步 安装virtualenvwrapper，用来管理虚拟环境

001、安装virtualenvwrapper

```
    pip3 install virtualenvwrapper
```



002、设置Linux的用户个人配置文件




```
vim ~/.bash_profile  # 直接编辑这个文件
添加以下几行内容
WORKON_HOME=~/Envs
VIRTUALENVWRAPPER_VIRTUALENV_ARGS='--no-site-packages'
VIRTUALENVWRAPPER_PYTHON=/opt/python36/bin/python3
source /opt/python36/bin/virtualenvwrapper.sh
```

```
# .bash_profile

# Get the aliases and functions
if [ -f ~/.bashrc ]; then
        . ~/.bashrc
fi

# User specific environment and startup programs

PATH=$PATH:$HOME/bin

export PATH
WORKON_HOME=~/Envs
VIRTUALENVWRAPPER_VIRTUALENV_ARGS='--no-site-packages'
VIRTUALENVWRAPPER_PYTHON=/opt/python36/bin/python3
source /opt/python36/bin/virtualenvwrapper.sh
~
~
~
~
~
~
~
~
~
~
```

003、重新读取此环境变量文件

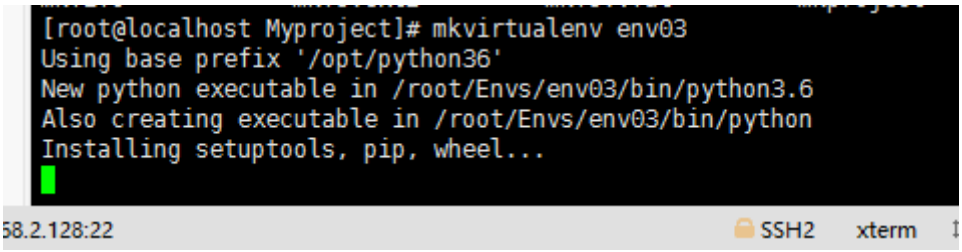
```
source ~/.bash_profile
```

```
[root@localhost ~]# source ~/.bash_profile
virtualenvwrapper.user_scripts creating /root/Envs/premkproject
virtualenvwrapper.user_scripts creating /root/Envs/postmkproject
virtualenvwrapper.user_scripts creating /root/Envs/initialize
virtualenvwrapper.user_scripts creating /root/Envs/premkvirtualenv
virtualenvwrapper.user_scripts creating /root/Envs/postmkvirtualenv
virtualenvwrapper.user_scripts creating /root/Envs/prermvirtualenv
virtualenvwrapper.user_scripts creating /root/Envs/postrmvirtualenv
virtualenvwrapper.user_scripts creating /root/Envs/predeactivate
virtualenvwrapper.user_scripts creating /root/Envs/postdeactivate
virtualenvwrapper.user_scripts creating /root/Envs/preactivate
virtualenvwrapper.user_scripts creating /root/Envs/postactivate
virtualenvwrapper.user_scripts creating /root/Envs/get_env_details
[root@localhost ~]#
```

004、virtualenvwrapper的基本使用：

```
1. 创建一个虚拟环境：
$ mkvirtualenv my_django115
这会在 ~/Envs 中创建 my_django115 文件夹。

2. 在虚拟环境上工作：激活虚拟环境my_django115
$ workon my_django115

3. 再创建一个新的虚拟环境
$ mkvirtualenv my_django2

virtualenvwrapper 提供环境名字的tab补全功能。
当有很多环境， 并且很难记住它们的名字时，这就显得很有用。

4. workon还可以任意停止你当前的环境，可以在多个虚拟环境中来回切换
workon django1.15
workon django2.0
```

```
5. 也可以手动停止虚拟环境
deactivate

6. 删除虚拟环境，需要先退出虚拟环境
rmvirtualenv my_django115
```



第七步：安装mariadb(mysql)

```
https://www.cnblogs.com/tiger666/articles/10259269.html
```

001、使用官方源安装mariadb

```
教程:
https://www.cnblogs.com/tiger666/articles/10259269.html
https://www.cnblogs.com/yhongji/p/9783065.html
```

002、 使用官方源安装mariadb，首先在 RHEL/CentOS 和 Fedora 操作系统中添加 MariaDB 的 YUM 配置文件 MariaDB.repo 文件。

刚开始时没有的，需要添加

```
vim /etc/yum.repos.d/MariaDB.repo
添加repo仓库配置内容
[mariadb]
name=MariaDB
baseurl=http://yum.mariadb.org/10.1/centos7-amd64
gpgkey=https://yum.mariadb.org/RPM-GPG-KEY-MariaDB
gpgcheck=1
```

003、 当 MariaDB 仓库地址添加好后，一条命令安装官方的最新版本mariadb数据库

```
yum install MariaDB-server MariaDB-client -y
```

004、配置MariaDB

```
[root@mini ~]# systemctl start mariadb  # 开启服务
[root@mini ~]# systemctl enable mariadb  # 设置为开机自启动服务
```

005、首次安装需要进行数据库的配置，命令都和mysql的一样

```
mysql_secure_installation
```

006、配置时出现的各个选项

```
# 第一次进入还没有设置密码则直接回车
Enter current password for root (enter for none):  # 输入数据库超级管理员root的密码(注意不是系统root的密码)，第一次进入还没有设置密码则直接回车

Set root password? [Y/n]  # 设置密码，y

New password:  # 新密码
Re-enter new password:  # 再次输入密码

Remove anonymous users? [Y/n]  # 移除匿名用户， y

Disallow root login remotely? [Y/n]  # 拒绝root远程登录，n，不管y/n，都会拒绝root远程登录

Remove test database and access to it? [Y/n]  # 删除test数据库，y：删除。n：不删除，数据库中会有一个test数据库，一般不需要

Reload privilege tables now? [Y/n]  # 重新加载权限表，y。或者重启服务也许
```

测试是否能够登录成功，出现 MariaDB [(none)]> 就表示已经能够正常登录使用MariaDB数据库了

```
[root@mini ~]# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 5.5.60-MariaDB MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

007、设置MariaDB字符集为utf-8

```
一、修改配置文件/etc/my.cnf

vi /etc/my.cnf

在[mysqld]标签下添加

#character
init_connect='SET collation_connection = utf8_unicode_ci'
init_connect='SET NAMES utf8'
character-set-server=utf8
collation-server=utf8_unicode_ci
skip-character-set-client-handshake

二、配置文件/etc/my.cnf.d/client.cnf
vi /etc/my.cnf.d/client.cnf

在[client]下添加

#character
default-character-set=utf8
```

三、配置文件/etc/my.cnf.d/mysql-clients.cnf

```
 vi /etc/my.cnf.d/mysql-clients.cnf
```

在[mysql]中添加

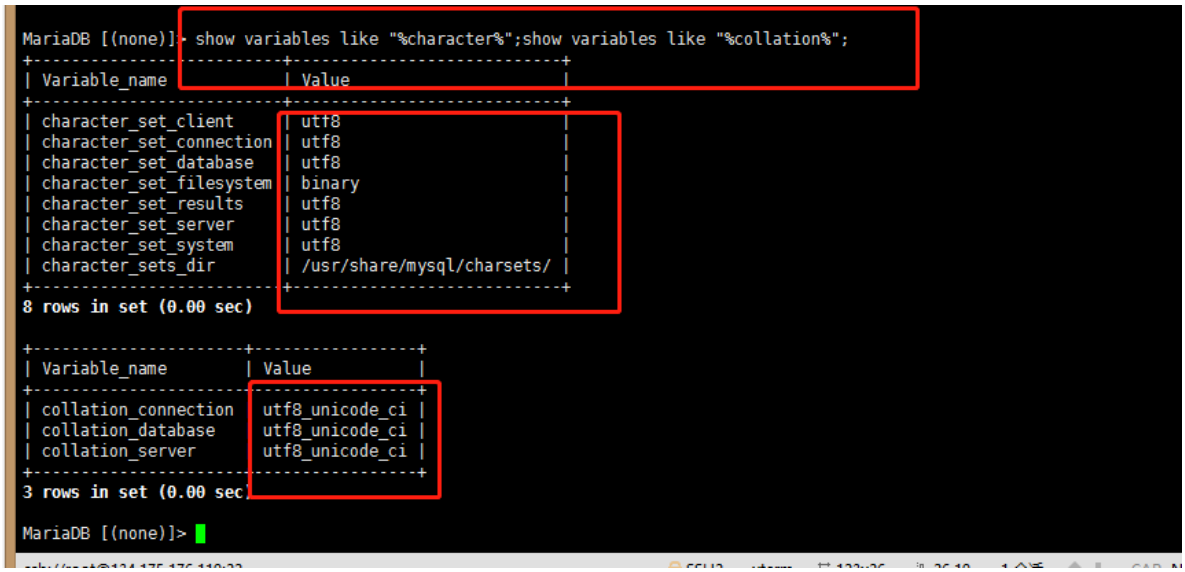
```
#character

default-character-set=utf8
```

四、重启MariaDB服务

```
service mariadb restart
```

五、查看字符集

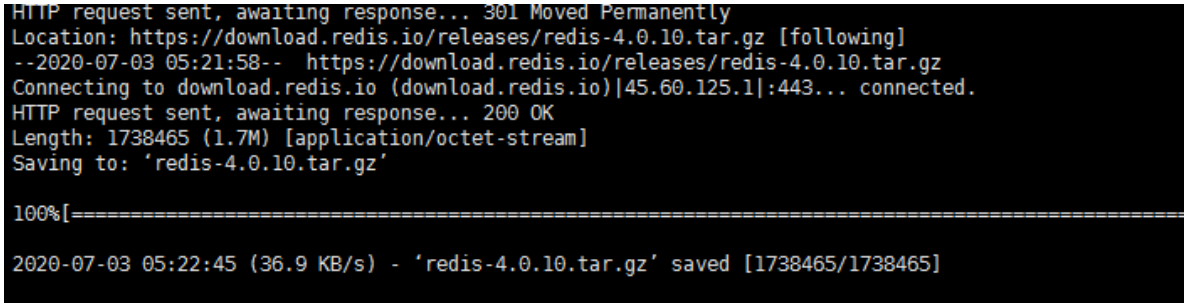
```
show variables like "%character%";show variables like "%collation%";
```



第八步：安装redis

1.下载redis源码

```
wget http://download.redis.io/releases/redis-4.0.10.tar.gz
```



2.解压缩

```
tar -zxf redis-4.0.10.tar.gz
```

```
[root@localhost opt]# tar -zxf redis-4.0.10.tar.gz
[root@localhost opt]# ls
mysite  python36  Python-3.6.6  Python-3.6.6.tgz  redis-4.0.10  redis-4.0.10.tar.gz  rh
[root@localhost opt]#
```

3.切换redis源码目录

```
cd redis-4.0.10
```

```
ysite  python36  Python-3.6.6  Python-3.6.6.tgz  redis-4.0.10  redis-4.0.10.tar.gz  rh
root@localhost opt]# cd redis-4.0.10/
root@localhost redis-4.0.10]# ls
0-RELEASENOTES  CONTRIBUTING  deps     Makefile   README.md   runtest          runtest-sentinel  src    utils
UGS             COPYING       INSTALL  MANIFESTO  redis.conf  runtest-cluster  sentinel.conf     tests
root@localhost redis-4.0.10]#
```

4.编译源文件

```
make
```

```
[root@localhost redis-4.0.10]# make
cd src && make all
make[1]: Entering directory `/opt/redis-4.0.10/src'
    CC Makefile.dep
make[1]: Leaving directory `/opt/redis-4.0.10/src'
make[1]: Entering directory `/opt/redis-4.0.10/src'
rm -rf redis-server redis-sentinel redis-cli redis-benchmark redis-check-rdb r
ile.dep dict-benchmark
(cd ../deps && make distclean)
make[2]: Entering directory `/opt/redis-4.0.10/deps'
```

5.编译好后，src/目录下有编译好的redis指令

```
root@localhost opt]# cd redis-4.0.10/
root@localhost redis-4.0.10]# ls
0-RELEASENOTES  CONTRIBUTING  deps     Makefile   README.md   runtest          runtest-sentinel  src    utils
UGS             COPYING       INSTALL  MANIFESTO  redis.conf  runtest-cluster  sentinel.conf     tests
root@localhost redis-4.0.10]# cd src
root@localhost src]# ls
dlist.c     blocked.c     dict.c          hyperloglog.o  multi.c       rax.o          release.h       sha1.o          t
dlist.h     blocked.o     dict.h          intset.c       multi.o       rdb.c          release.o       siphash.c       t
dlist.o     childinfo.c   dict.o          intset.h       networking.c  rdb.h          replication.c   siphash.o       t
e.c         childinfo.o   endianconv.c    intset.o       networking.o  rdb.o          replication.o   slowlog.c       u
```

6.make install 安装到指定目录，默认在/usr/local/bin

```
make install prefix=/opt/redis4.0
```

```
Hint: It's a good idea to run 'make test' ;)

make[1]: Leaving directory `/opt/redis-4.0.10/src'
[root@localhost redis-4.0.10]# make install
cd src && make install
make[1]: Entering directory `/opt/redis-4.0.10/src'
    CC Makefile.dep
make[1]: Leaving directory `/opt/redis-4.0.10/src'
make[1]: Entering directory `/opt/redis-4.0.10/src'

Hint: It's a good idea to run 'make test' ;)

    INSTALL install
    INSTALL install
    INSTALL install
    INSTALL install
    INSTALL install
make[1]: Leaving directory `/opt/redis-4.0.10/src'
[root@localhost redis-4.0.10]# mkdir /opt/redis_conf
[root@localhost redis-4.0.10]# ls
00-RELEASENOTES  CONTRIBUTING  deps     Makefile   README.md   runtest          runtes
BUGS             COPYING       INSTALL  MANIFESTO  redis.conf  runtest-cluster  sentin
[root@localhost redis-4.0.10]#
```

7 创建一个专门存放redis配置文件目录

```
[root@localhost redis-4.0.10]# mkdir /opt/redis_conf
[root@localhost redis-4.0.10]# ls
00-RELEASENOTES  CONTRIBUTING  deps     Makefile   README.md   runtest          runtes
BUGS             COPYING       INSTALL  MANIFESTO  redis.conf  runtest-cluster  sentin
[root@localhost redis-4.0.10]#
```

8、在/opt/redis_conf/ 下配置完上诉配置文件 vim redis-6379.conf

启动时会提示没有 /data/6379这个文件，需要手动创建，后续 在任何目录下，只要执行这个路径，redis就可以被启动了

```
mkdir /opt/redis_conf
vim redis-6379.conf
写入以下配置
port 6379
daemonize yes
pidfile /data/6379/redis.pid  #/data/6379  这个文件需要创建
loglevel notice
logfile "/data/6379/redis.log"
protected-mode yes
```

在root目录创建data目录

```
mkdir -p /data/6379
```

```
[root@VM-0-14-centos /]# ls
bin   data  etc   lib    lost+found  mnt        opt   root  sbin  sys  usr
boot  dev   home  lib64  media       Myproject  proc  run   srv   tmp  var
[root@VM-0-14-centos /]# cd data
[root@VM-0-14-centos data]# ls
6379
[root@VM-0-14-centos data]#
ssh://root@134.175.176.119:22   SSH2  xterm  123x26  26,29  2 会话
```

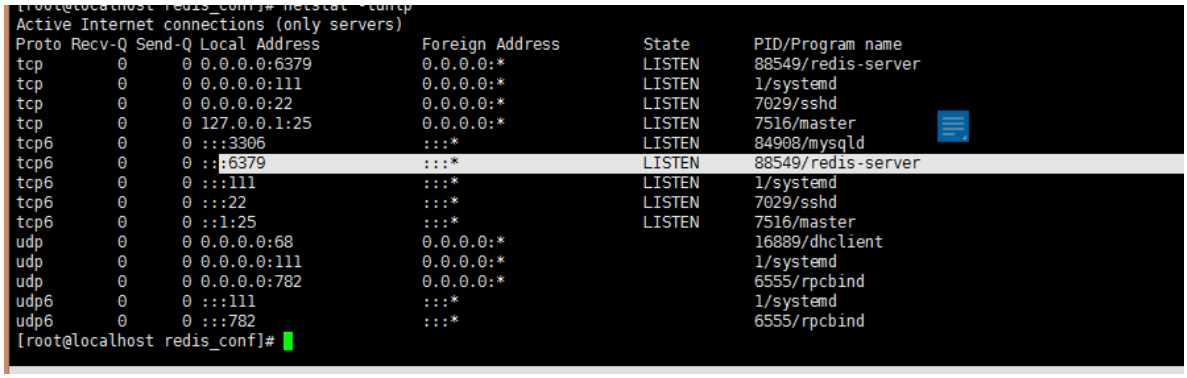
```
[root@localhost opt]# ls
mysite  python36  Python-3.6.6  Python-3.6.6.tgz  redis-4.0.10  redis-4.0.10.tar.gz  redis_conf  rh
[root@localhost opt]#
ssh://root@192.168.1.102:22   SSH2  xterm  144x28  28,23  2 会
```

然后再执行 redis-server /opt/redis_conf/redis-6379.conf 将这个路径指定为启动redis的目录。

```
redis-server /opt/redis_conf/redis-6379.conf
```

后续 在任何目录下，只要执行这个路径，redis就可以被启动了

```
netstat -tunlp 查看端口号码是否启动。
```



9、redis配置文件详解

```
port 6379                          # 运行在6379的redis数据库实例
daemonize yes                      # 后台运行redis
pidfile /data/6379/redis.pid       # 存放redis pid的文件
loglevel notice                    # 日志等级
logfile "/data/6379/redis.log"     # 指定redis日志文件的生成目录
dir /data/6379                     # 指定redis数据文件夹的目录
protected-mode yes                 # 安全模式
requirepass    haohaio             # 设置redis的密码
```

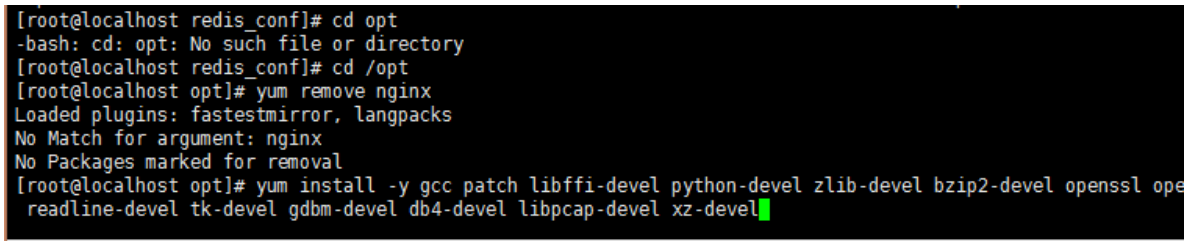
第九步：nginx编译安装

001、卸载nginx

```
yum remove nginx
```

002、 安装所需要的依赖库

```
yum install -y gcc patch libffi-devel python-devel zlib-devel bzip2-devel
openssl openssl-devel ncurses-devel sqlite-devel readline-devel tk-devel gdbm-
devel db4-devel libpcap-devel xz-devel
```



003 下载nginx安装源码包

wget -c https://nginx.org/download/nginx-1.12.0.tar.gz

```
[root@localhost opt]# wget -c https://nginx.org/download/nginx-1.12.0.tar.gz
--2020-07-03 05:41:37--  https://nginx.org/download/nginx-1.12.0.tar.gz
Resolving nginx.org (nginx.org)... 95.211.80.227, 62.210.92.35, 2001:1af8:4060:a004:21::e3
Connecting to nginx.org (nginx.org)|95.211.80.227|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 980831 (958K) [application/octet-stream]
Saving to: 'nginx-1.12.0.tar.gz'

87% [=============================================================================================>            ] 859,8
```

```
[root@localhost opt]# ls
mysite  nginx-1.12.0.tar.gz  python36  Python-3.6.6  Python-3.6.6.tgz  redis-4.0.10  redis-4.0.10.tar.gz  redis_conf  rh
[root@localhost opt]#
```

004.解压缩源码

```
tar -zxvf nginx-1.12.0.tar.gz
```

```
nginx-1.12.0/auto/lib/pcre/conf
nginx-1.12.0/auto/lib/pcre/make
nginx-1.12.0/auto/lib/pcre/makefile.msvc
nginx-1.12.0/auto/lib/pcre/makefile.owc
nginx-1.12.0/auto/lib/openssl/makefile.bcc
nginx-1.12.0/auto/lib/openssl/conf
nginx-1.12.0/auto/lib/openssl/make
nginx-1.12.0/auto/lib/openssl/makefile.msvc
nginx-1.12.0/auto/lib/libxslt/conf
nginx-1.12.0/auto/lib/libgd/conf
nginx-1.12.0/auto/lib/libatomic/conf
nginx-1.12.0/auto/lib/libatomic/make
nginx-1.12.0/auto/lib/google-perftools/conf
nginx-1.12.0/auto/lib/geoip/conf
nginx-1.12.0/auto/cc/clang
nginx-1.12.0/auto/cc/acc
nginx-1.12.0/auto/cc/bcc
nginx-1.12.0/auto/cc/ccc
nginx-1.12.0/auto/cc/conf
nginx-1.12.0/auto/cc/gcc
nginx-1.12.0/auto/cc/icc
nginx-1.12.0/auto/cc/msvc
nginx-1.12.0/auto/cc/name
nginx-1.12.0/auto/cc/owc
nginx-1.12.0/auto/cc/sunc
[root@localhost opt]#
```

005.配置，编译安装

```
cd nginx-1.12.0/

./configure --prefix=/opt/nginx112
```

```
[root@localhost opt]# cd nginx-1.12.0/
[root@localhost nginx-1.12.0]# ls
auto  CHANGES  CHANGES.ru  conf  configure  contrib  html  LICENSE  man  README  src
[root@localhost nginx-1.12.0]# ./configure --prefix=/opt/nginx112
```

```
make && make install
```

```
nginx binary file: "/opt/nginx112/sbin/nginx"
nginx modules path: "/opt/nginx112/modules"
nginx configuration prefix: "/opt/nginx112/conf"
nginx configuration file: "/opt/nginx112/conf/nginx.conf"
nginx pid file: "/opt/nginx112/logs/nginx.pid"
nginx error log file: "/opt/nginx112/logs/error.log"
nginx http access log file: "/opt/nginx112/logs/access.log"
nginx http client request body temporary files: "client_body_temp"
nginx http proxy temporary files: "proxy_temp"
nginx http fastcgi temporary files: "fastcgi_temp"
nginx http uwsgi temporary files: "uwsgi_temp"
nginx http scgi temporary files: "scgi_temp"

[root@localhost nginx-1.12.0]# make && make install
```

006 .启动nginx，进入sbin目录,找到nginx启动命令

```
[root@localhost opt]# ls
mysite     nginx-1.12.0         python36      Python-3.6.6.tgz  redis-4.0.10.tar.gz  rh
nginx112   nginx-1.12.0.tar.gz  Python-3.6.6  redis-4.0.10      redis_conf
[root@localhost opt]#
```

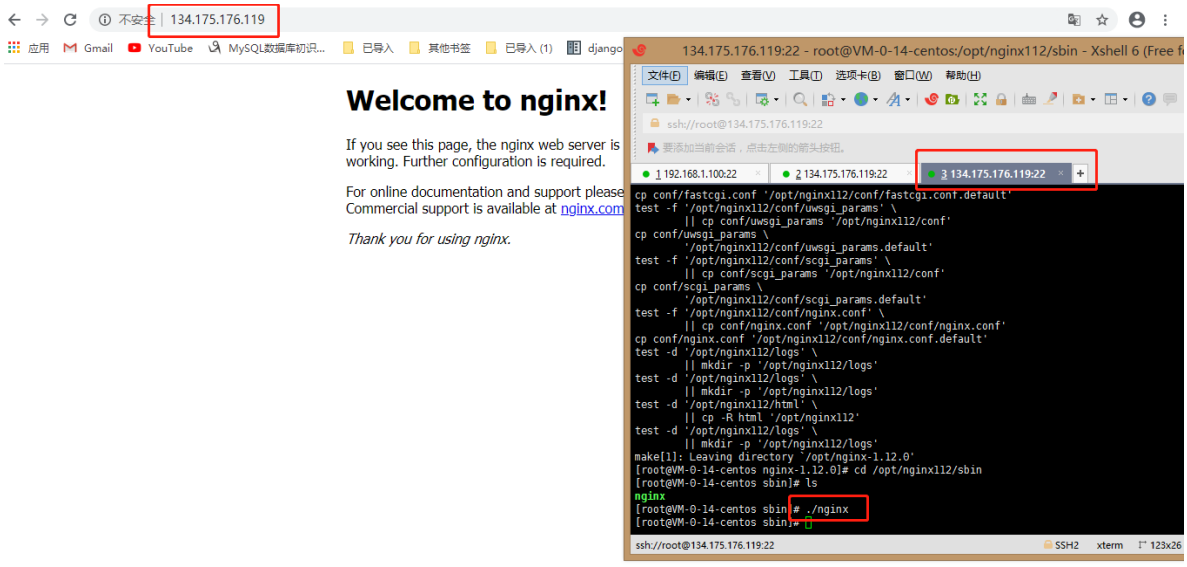
```
cd /opt/nginx112/sbin
./nginx #启动
./nginx -s stop #关闭
./nginx -s reload # 平滑重启 ， 修改了nginx.conf之后，可以不重启服务，加载新的配置
或者  /opt/nginx112/sbin/nginx -s reload  # 绝对路径平滑重启
```

```
[root@localhost opt]# cd /opt/nginx112/sbin
[root@localhost sbin]# ls
nginx
[root@localhost sbin]#
```

启动：

```
[root@localhost sbin]# ./nginx
[root@localhost sbin]#
ssh://root@192.168.1.102:22
```

然后使用本机的服务器ip访问：如果有线上服务器就用线上服务器的外网ip访问，不需要加 端口号



007 nginx的目录结构

```
[root@localhost nginx112]# ls
client_body_temp  conf  fastcgi_temp  html  logs  proxy_temp  sbin  scgi_temp  uwsgi_temp
[root@localhost nginx112]#
```

```
[root@localhost nginx112]# ls
client_body_temp  conf  fastcgi_temp  html  logs  proxy_temp  sbin  scgi_temp  uwsgi_temp
[root@localhost nginx112]# cat conf/
cat: conf/: Is a directory
[root@localhost nginx112]# cd conf/
[root@localhost conf]# ls
fastcgi.conf          fastcgi_params.default  mime.types          nginx.conf.default   uwsgi_params
fastcgi.conf.default  koi-utf                 mime.types.default  scgi_params          uwsgi_params.default
fastcgi_params        koi-win                 nginx.conf          scgi_params.default  win-utf
[root@localhost conf]# cat nginx.conf

#user  nobody;
worker_processes  1;

#error_log  logs/error.log;
#error_log  logs/error.log  notice;
#error_log  logs/error.log  info;

#pid        logs/nginx.pid;


events {
    worker_connections  1024;
```

ssh://root@192.168.1.102:22 SSH2 xterm 144x28

Nginx的目录结构

我们cd /opt/nginx112目录下,就可以看到以下几个文件夹

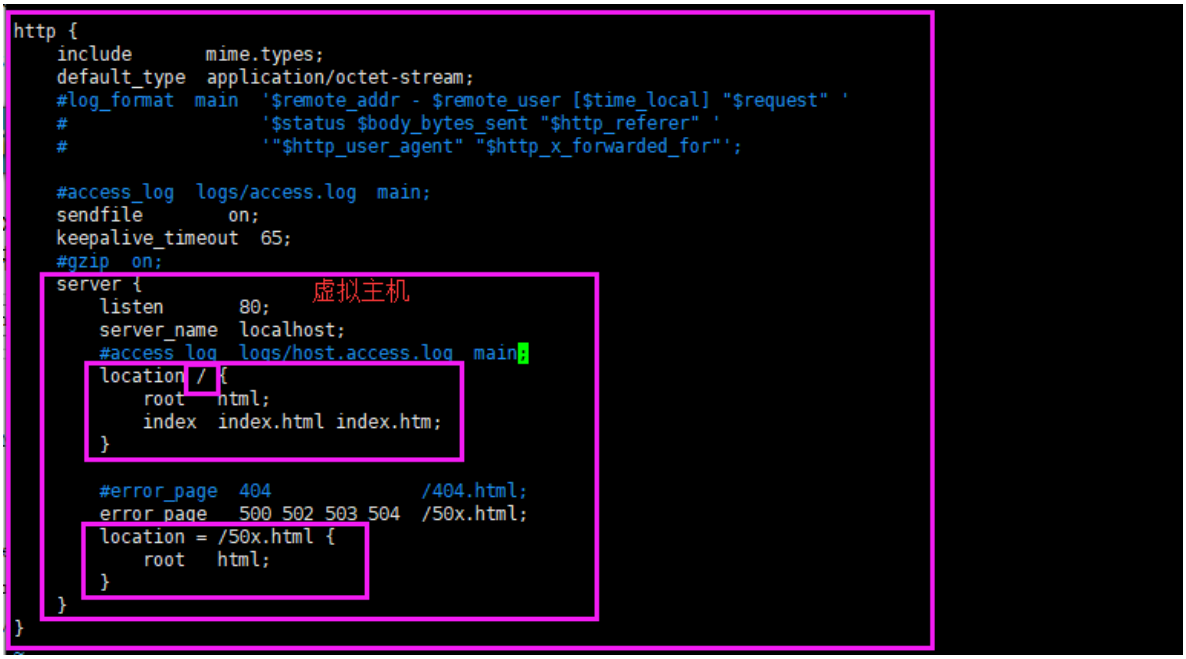
```
[root@oldboy_python /opt/nginx1-12 11:44:02]#ls
client_body_temp  conf  fastcgi_temp  html  logs  proxy_temp  sbin  scgi_temp  static  uwsgi_temp
```

- conf 存放nginx所有配置文件的目录,主要nginx.conf
- html 存放nginx默认站点的目录，如index.html、error.html等
- logs 存放nginx默认日志的目录，如error.log access.log
- sbin 存放nginx主命令的目录,sbin/nginx

008 nginx配置文件详解


```
[root@localhost nginx112]# ls
client_body_temp  conf  fastcgi_temp  html  logs  proxy_temp  sbin  scgi_temp  uwsgi_temp
[root@localhost nginx112]# cat conf/
cat: conf/: Is a directory
[root@localhost nginx112]# cd conf/
[root@localhost conf]# ls
fastcgi.conf          fastcgi_params.default  mime.types          nginx.conf.default   uwsgi_params
fastcgi.conf.default  koi-utf                 mime.types.default  scgi_params          uwsgi_params.default
fastcgi_params        koi-win                 nginx.conf          scgi_params.default  win-utf
[root@localhost conf]# cat nginx.conf

#user  nobody;
worker_processes  1;

#error_log  logs/error.log;
#error_log  logs/error.log  notice;
#error_log  logs/error.log  info;

#pid        logs/nginx.pid;


events {
    worker_connections  1024;
```

ssh://root@192.168.1.102:22 SSH2 xterm 144x28




```
#定义nginx工作进程数
worker_processes  5;
#错误日志
#error_log  logs/error.log;
#http定义代码主区域
http {
    include       mime.types;
    default_type  application/octet-stream;
    #定义nginx的访问日志功能
    #nginx会有一个accses.log功能，查看用户访问的记录
    log_format  main  '$remote_addr - $remote_user [$time_local] "$request" '
                      '$status $body_bytes_sent "$http_referer" '
                      '"$http_user_agent" "$http_x_forwarded_for"';

    #开启日志功能
    access_log  logs/access.log  main;
    sendfile        on;
    keepalive_timeout  65;
    #开启gzip压缩传输
    gzip  on;
    #虚拟主机1  定义一个 斗鱼网站
    server {
        #定义nginx的访问入口端口，访问地址是  192.168.11.37:80
        listen       80;
        #定义网站的域名www.woshidouyu.tv
        #如果没有域名，就填写服务器的ip地址  192.168.11.37
        server_name  www.woshidouyu.tv;
        #nginx的url域名匹配
        #只要请求来自于www.woshidouyu.tv/111111111
        #只要请求来自于www.woshidouyu.tv/qweqwewqe
        #最低级的匹配，只要来自于www.woshidouyu.tv这个域名，都会走到这个location
        location / {
            #这个root参数，也是关键字，定义网页的根目录
            #以nginx安装的目录为相对路径  /opt/nginx112/html
            #可以自由修改这个root定义的网页根目录
            root   html;
            #index参数定义网站的首页文件名，默认的文件名
            index  index.html index.htm;
```

```
        }
        #错误页面的优化(只要是遇到前面4系列的错误，就会直接跳转到相对目录下的40x.html页面)
        error_page  400 401  402  403  404   /40x.html;
    }
}
```

009、 跑一个斗鱼网站出来

```
    server {
        listen       80;
        server_name  www.qishi2douyu.com;
        #access_log  logs/host.access.log  main;
        location / {
            root   /opt/qishi2douyu/;
            index  index.html index.html;
        }

        #error_page  404              /404.html;
        error_page   500 502 503 504  /50x.html;
        location = /50x.html {
            root   html;
        }
    }
```

二、实际部署myblog项目到centos：创建myblog的专用虚拟环境进行项目的部署

一个非常详细的部署博客：

```
https://www.django.cn/article/show-4.html#banqian  # 这个比较详细点
https://www.jianshu.com/p/956debe2891d
```

在root目录创建一个myblog目录，将 项目文件压缩后，和requirements.txt,myblog.sql一并上传到这个目录

前提：

(1) 收集静态文件 ,修改settings.py配置文件， 加入以下一行配置
STATIC_ROOT='/opt/myblog/static'

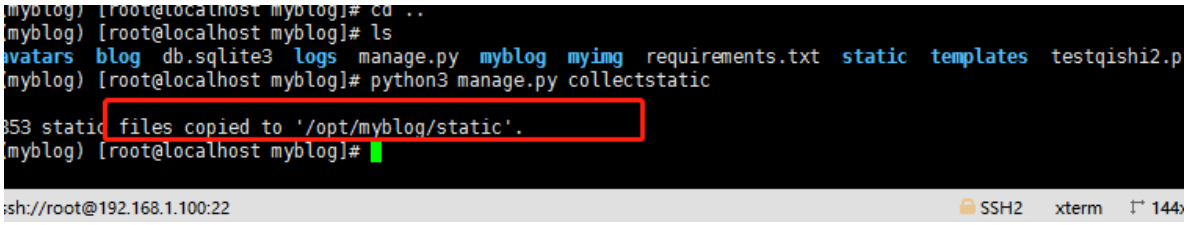
```
STATIC_ROOT='/opt/myblog/static'
```

(2) 创建静态文件存放目录/opt/myblog/static

```
mkdir -p /opt/myblog/static
```

(3) 一条命令收集django项目下面的所有静态文件(切换到存放luffy后端有manage.py的文件下),可以在虚拟环境下收集

```
python3 manage.py collectstatic
```

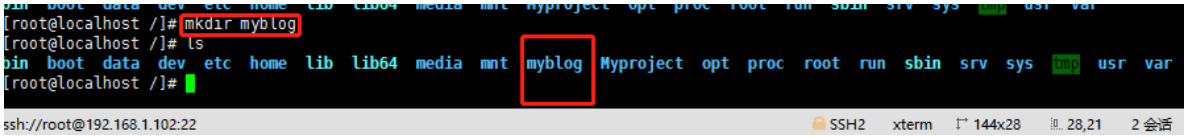


001、备份本地数据库和导出项目使用的安装包

```
将本地的django项目的数据库备份出来，进入mysql，使用命令行导出
将mylog这个数据库导出到d盘的615文件夹下的myblog.sql

mysqldump -h localhost -u root -p myblog >d:\615\myblog.sql


导出项目使用的安装包
pip3 freeze > requirements.txt
```

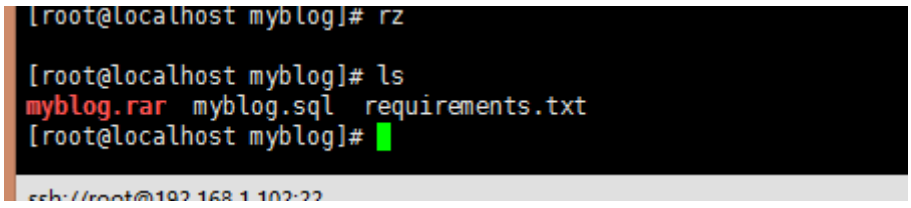
002、专门创建一个myblog的文件夹来保存项目和requirements.txt和myblog.sql

```
在 root/ 新建一个myblog文件夹
[root@localhost /]# mkdir myblog
```



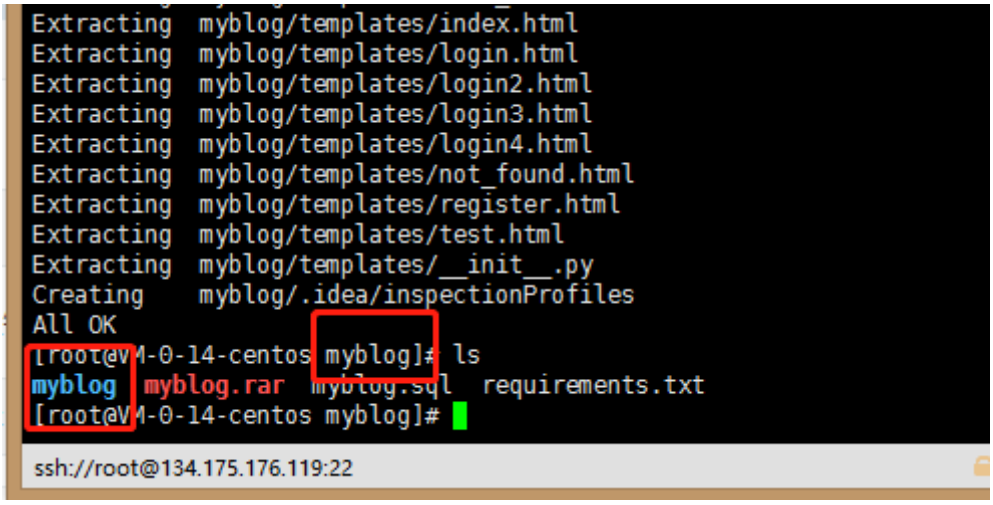
003、使用rz命令上传文件

```
先安装yum install lrzsz -y

rz
```



004、由于上传的项目是rar，所以需要解压

```
下载解压软件
wget http://www.rarlab.com/rar/rarlinux-x64-5.3.0.tar.gz
安装
tar zxvf rarlinux-x64-5.3.0.tar.gz

cd rar
make
解压当前目录：rar x test.rar //解压 test.rar 到当前目录
压缩：rar test.rar ./test/ //将 test目录打包为 test.rar
```



005、创建新的虚拟环境

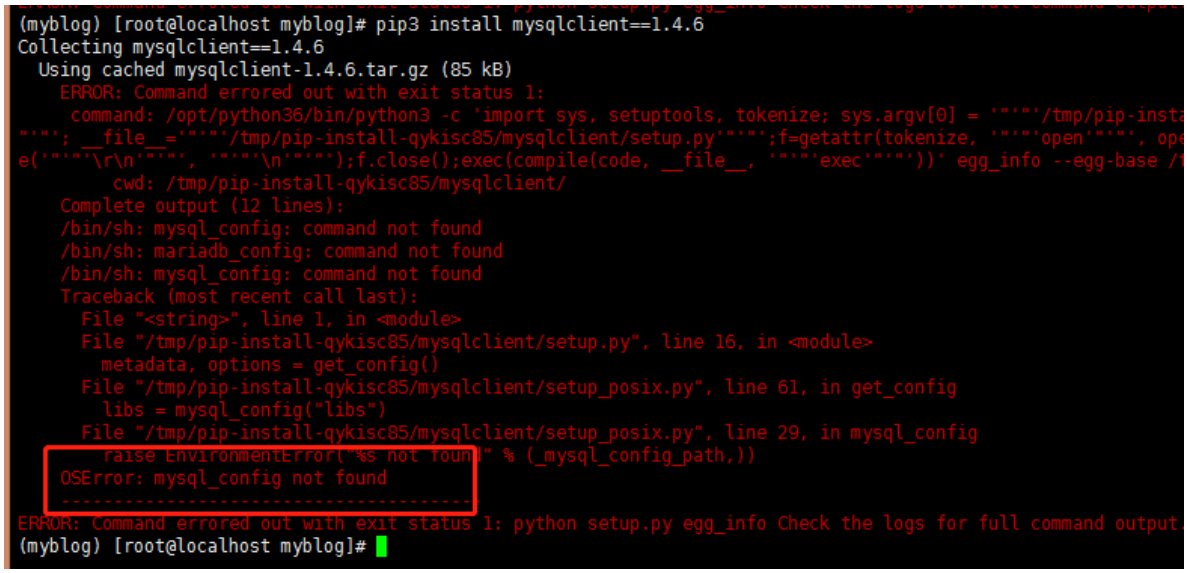
```
mkvirtualenv myblog
```

在虚拟环境下安装mysqlclient报错，主要错误：

```
OSError: mysql_config not found
```

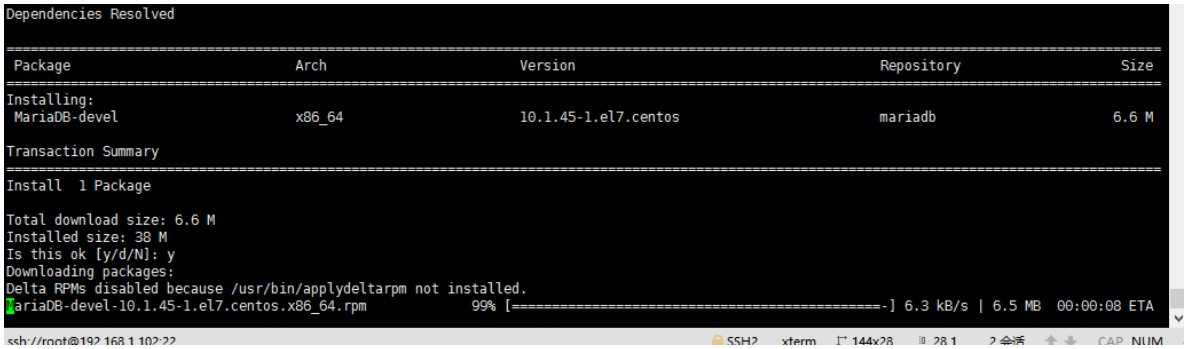
```
   ERROR: Command errored out with exit status 1:
     command: /opt/python36/bin/python3 -c 'import sys, setuptools, tokenize;
sys.argv[0] = '"'"'/tmp/pip-install-qykisc85/mysqlclient/setup.py'"'"';
__file__='"'"'/tmp/pip-install-
qykisc85/mysqlclient/setup.py'"'"';f=getattr(tokenize, '"'"'open'"'"', open)
(__file__);code=f.read().replace('"'"'\r\n'"'"',
'"'"'\n'"'"');f.close();exec(compile(code, __file__, '"'"'exec'"'"'))' egg_info
--egg-base /tmp/pip-pip-egg-info-q5jiiOtc
         cwd: /tmp/pip-install-qykisc85/mysqlclient/
    Complete output (12 lines):
    /bin/sh: mysql_config: command not found
    /bin/sh: mariadb_config: command not found
    /bin/sh: mysql_config: command not found
    Traceback (most recent call last):
      File "<string>", line 1, in <module>
      File "/tmp/pip-install-qykisc85/mysqlclient/setup.py", line 16, in
<module>
        metadata, options = get_config()
      File "/tmp/pip-install-qykisc85/mysqlclient/setup_posix.py", line 61, in
get_config
        libs = mysql_config("libs")
      File "/tmp/pip-install-qykisc85/mysqlclient/setup_posix.py", line 29, in
mysql_config
```

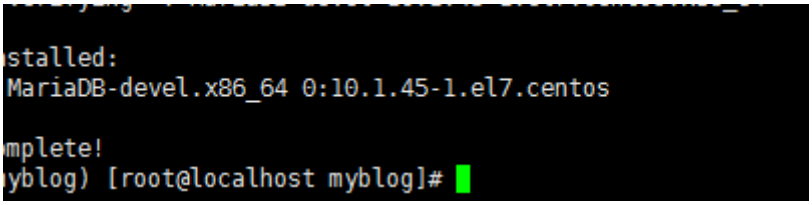
```
        raise EnvironmentError("%s not found" % (_mysql_config_path,))
    OSError: mysql_config not found
    ----------------------------------------
ERROR: Command errored out with exit status 1: python setup.py egg_info Check
the logs for full command output.
```



解决方案：

```
先安装mysql-deve , yum install mysql-devel
会自动找到mriadb-deve 进行安装
再安装mysqlclient
pip3 install mysqlclient==1.4.6
```





安装上面之后可能还会报错：

```
sl -lcrypto -o build/lib.linux-x86_64-3.6/MySQLdb/_mysql.cpython-36m-x86_64-
linux-gnu.so
    /usr/bin/ld: cannot find -lssl
    /usr/bin/ld: cannot find -lcrypto
    collect2: error: ld returned 1 exit status
    error: command 'gcc' failed with exit status 1
```

```
  running build_ext
  building 'MySQLdb._mysql' extension
  creating build/temp.linux-x86_64-3.6
  creating build/temp.linux-x86_64-3.6/MySQLdb
  gcc -pthread -Wno-unused-result -Wsign-compare -DNDEBUG -g -fwrapv -O3 -Wall -fPIC -Dversion_info=(1,4,6,'final',0) -D_
version__=1.4.6 -I/usr/include/mysql -I/opt/python36/include/python3.6m -c MySQLdb/_mysql.c -o build/temp.linux-x86_64-3.6
MySQLdb/_mysql.o
  MySQLdb/_mysql.c: In function '_mysql_field_to_python':
  MySQLdb/_mysql.c:1165:5: warning: case value '245' not in enumerated type 'enum enum_field_types' [-Wswitch]
       case 245: // JSON
       ^
  gcc -pthread -shared build/temp.linux-x86_64-3.6/MySQLdb/_mysql.o -L/usr/lib64 -lmysqlclient -lpthread -lz -lm -ldl -ls
l -lcrypto -o build/lib.linux-x86_64-3.6/MySQLdb/_mysql.cpython-36m-x86_64-linux-gnu.so
  /usr/bin/ld: cannot find -lssl
  /usr/bin/ld: cannot find -lcrypto
  collect2: error: ld returned 1 exit status
  error: command 'gcc' failed with exit status 1
  ----------------------------------------
RROR: Command errored out with exit status 1: /root/Envs/myblog/bin/python3.6 -u -c 'import sys, setuptools, tokenize; sys
argv[0] = '"'"'/tmp/pip-install-320wjncq/mysqlclient/setup.py'"'"'; __file__='"'"'/tmp/pip-install-320wjncq/mysqlclient/se
up.py'"'"';f=getattr(tokenize, '"'"'open'"'"', open)(__file__);code=f.read().replace('"'"'\r\n'"'"', '"'"'\n'"'"');f.close
);exec(compile(code, __file__, '"'"'exec'"'"'))' install --record /tmp/pip-record-kizikhfa/install-record.txt --single-ver
ion-externally-managed --compile --install-headers /root/Envs/myblog/include/site/python3.6/mysqlclient Check the logs for
full command output.
```

安装运行库：

```
yum install gcc libffi-devel python-devel openssl-devel -y
```

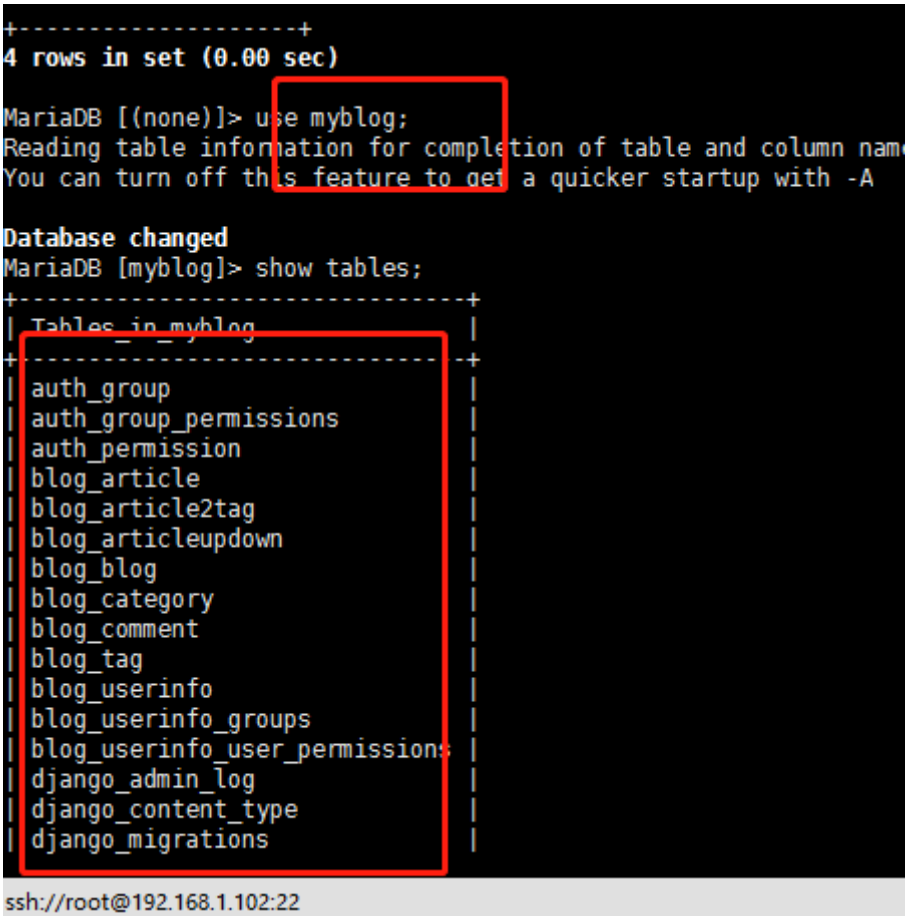
再安装：mysqlclient==1.4.6

```
pip3 install mysqlclient==1.4.6
```

```
Complete!
(myblog) [root@localhost myblog]# pip3 install mysqlclient==1.4.6
Collecting mysqlclient==1.4.6
  Using cached mysqlclient-1.4.6.tar.gz (85 kB)
Using legacy setup.py install for mysqlclient, since package 'wheel' is not installed.
Installing collected packages: mysqlclient
    Running setup.py install for mysqlclient ... done
Successfully installed mysqlclient-1.4.6
(myblog) [root@localhost myblog]#
```

将myblog.sql 数据导入到centos上的mariadb数据库中

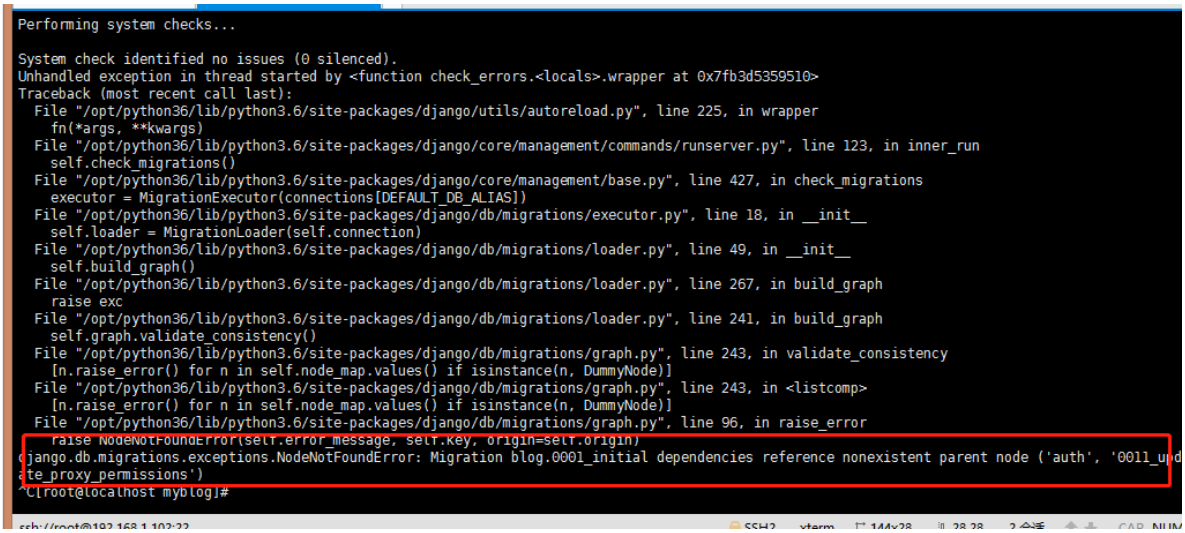
```
cd /myblog  # 有myblog.sql文件的文件夹下
然后进入mysql创建一个数据库
mysql -uroot -p 数据密码登陆
然后：
create database myblog;
接着退出mysql

执行：
[root@localhost myblog]# mysql -uroot -p myblog < myblog.sql
输入密码，然后进去查看
```



运行项目：会报错

项目部署参考博客：

```
https://www.cnblogs.com/djangocn/p/9538551.html
```




```
    fn(*args, **kwargs)
  File "/opt/python36/lib/python3.6/site-
packages/django/core/management/commands/runserver.py", line 123, in inner_run
    self.check_migrations()
  File "/opt/python36/lib/python3.6/site-
packages/django/core/management/base.py", line 427, in check_migrations
```

```
    executor = MigrationExecutor(connections[DEFAULT_DB_ALIAS])
  File "/opt/python36/lib/python3.6/site-
packages/django/db/migrations/executor.py", line 18, in __init__
    self.loader = MigrationLoader(self.connection)
  File "/opt/python36/lib/python3.6/site-
packages/django/db/migrations/loader.py", line 49, in __init__
    self.build_graph()
  File "/opt/python36/lib/python3.6/site-
packages/django/db/migrations/loader.py", line 267, in build_graph
    raise exc
  File "/opt/python36/lib/python3.6/site-
packages/django/db/migrations/loader.py", line 241, in build_graph
    self.graph.validate_consistency()
  File "/opt/python36/lib/python3.6/site-
packages/django/db/migrations/graph.py", line 243, in validate_consistency
    [n.raise_error() for n in self.node_map.values() if isinstance(n,
DummyNode)]
  File "/opt/python36/lib/python3.6/site-
packages/django/db/migrations/graph.py", line 243, in <listcomp>
    [n.raise_error() for n in self.node_map.values() if isinstance(n,
DummyNode)]
  File "/opt/python36/lib/python3.6/site-
packages/django/db/migrations/graph.py", line 96, in raise_error
    raise NodeNotFoundError(self.error_message, self.key, origin=self.origin)
django.db.migrations.exceptions.NodeNotFoundError: Migration blog.0001_initial
dependencies reference nonexistent parent node ('auth',
'0011_update_proxy_permissions')
```

出现错误的原因，django的版本问题，centos里面是2.0的，我的需要升级到3.0版本

```
pip3 install --upgrade Django==3.0.6
```

重新进入项目文件，启动项目,需要进入虚拟环境运行

```
python3 manage.py runserver 0.0.0.0:8000
```

然后设置项目的settings.py文件的host

```
ALLOWED_HOSTS = ["*"]
```

```
# SECURITY WARNING: don't run with debug turned on in production!
DEBUG = True

ALLOWED_HOSTS = ["*"]

# Application definition

INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'blog',
]

MIDDLEWARE = [
    'django.middleware.security.SecurityMiddleware',
    'django.contrib.sessions.middleware.SessionMiddleware',
    'django.middleware.common.CommonMiddleware',
    'django.middleware.csrf.CsrfViewMiddleware',
```

启动没报错：，

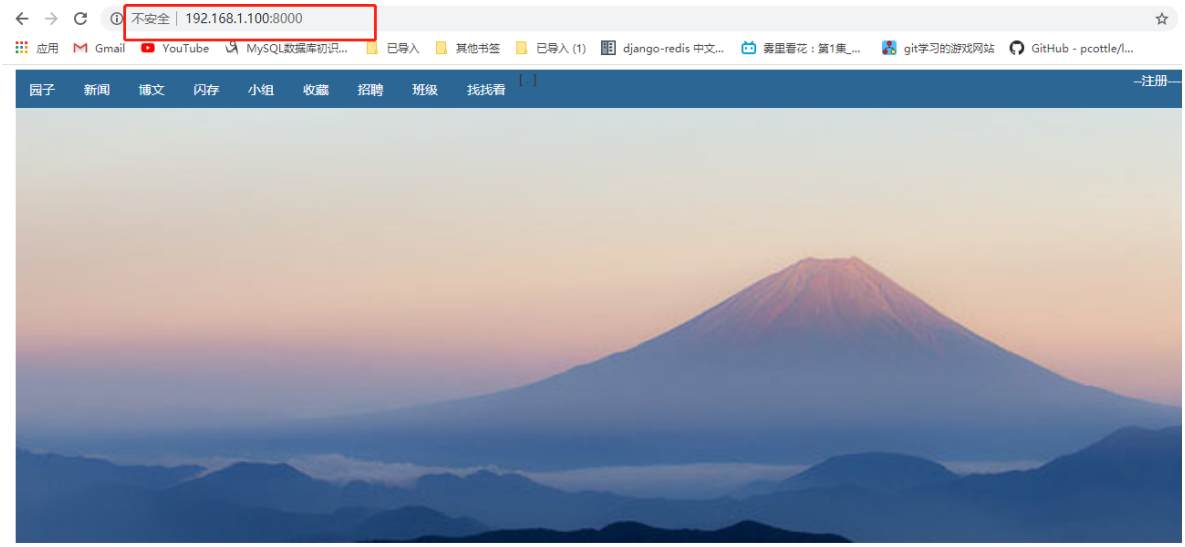
```
(myblog) [root@localhost myblog]# ls
avatars  blog  db.sqlite3  logs  manage.py  myblog  myimg  requirements.txt  static  templates
(myblog) [root@localhost myblog]# python3 manage.py runserver 0.0.0.0:8000
INFO autoreload 598 Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
July 03, 2020 - 17:18:26
Django version 3.0.6, using settings 'myblog.settings'
Starting development server at http://0.0.0.0:8000/
Quit the server with CONTROL-C.
```

ssh://root@192.168.1.100:22 SSH2 xterm 160x3

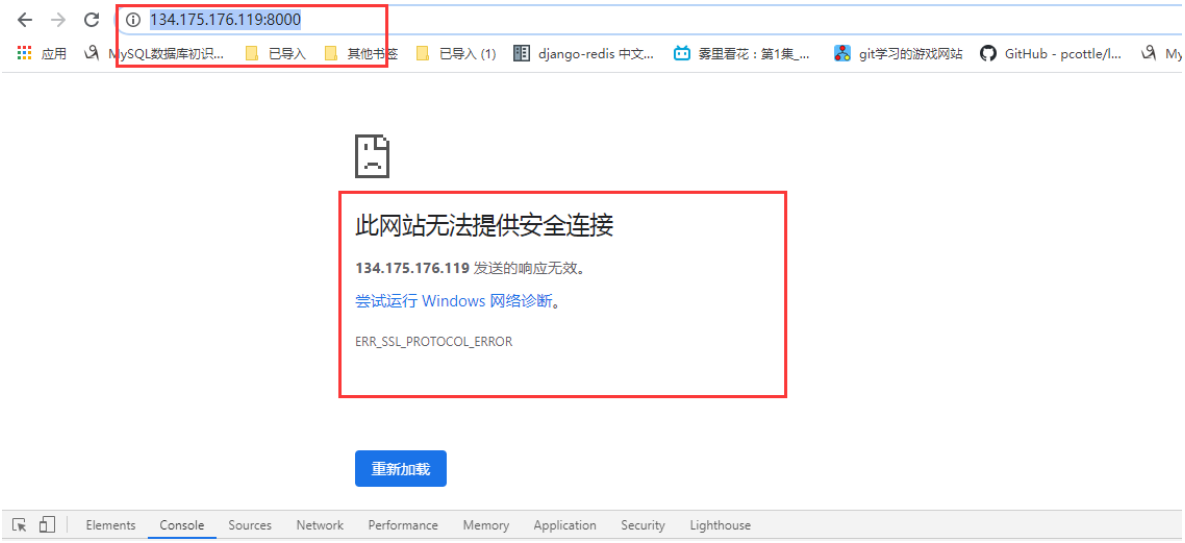
浏览器使用当前ip加上指定端口访问，发现访问不到,这里使用manage.py 访问需要加端口的访问的

关闭防火墙：再重启项目，可以访问到了,当然，项目中settings.py的 修改为ALLOWED_HOSTS = ["*"]

然后关闭防火墙：`systemctl stop firewalld.service` # 线上服务器好像不用关闭防火墙



可能在会出现访问线上服务端ip的时候（https://134.175.176.119:8000/），在浏览器段会出现



原因是

，发现是因为`https`的问题，我在腾讯云上的服务是没有配置安全认证的，但是我在浏览器上输入`IP`和端口回车之后，浏览器默认补充了`https`，请求链接变为`https://134.175.176.119:8000/`，这久导致了上面的提示。去掉`s`，改为`http://134.175.176.119:8000/`就可以正常访问了。

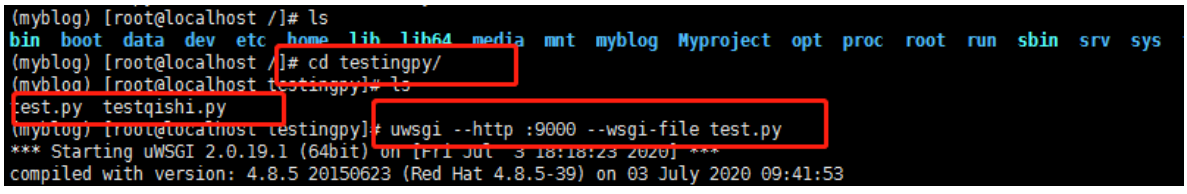
005、配置uwsgi

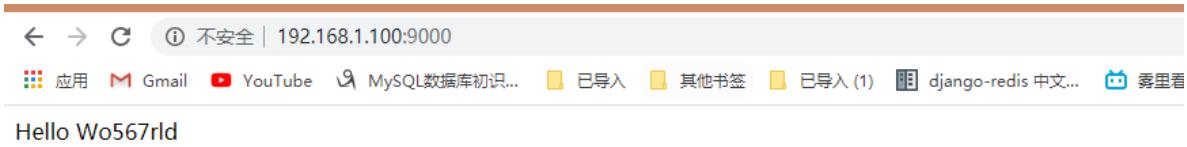
第一步：进入所在的myblog虚拟环境，安装uwsgi

```
workon myblog
pip3 install uwsgi
```

2 uwsgi 启动测试文件

```
(1) 创建一个testqishi2.py
vim testqishi2.py
(2) 写入以下几行代码
def application(env, start_response):
    start_response('200 OK', [('Content-Type','text/html')])
    return [b"Hello World"] # python3
(3) 通过uwsgi命令将测试文件跑起来
uwsgi --http :9000 --wsgi-file testqishi2.py
uwsgi --http :8000 --wsgi-file testqishi.py
(4) 测试通过自己本机的IP+端口访问
http://192.168.12.56:9000
```

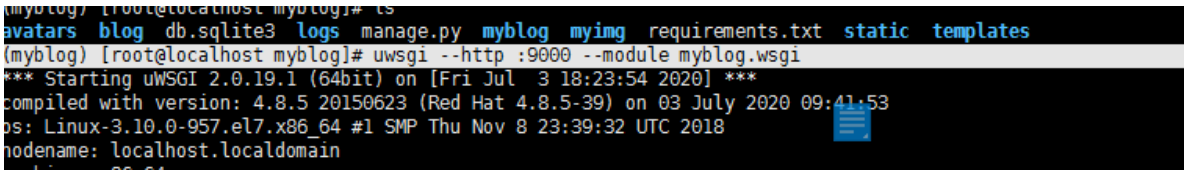




3 uwsgi启动django项目

```
uwsgi --http :9000 --module myblog.wsgi
```

用uwsgi启动项目，必须要进入到后端django的项目下启动，在项目有manage.py的层面

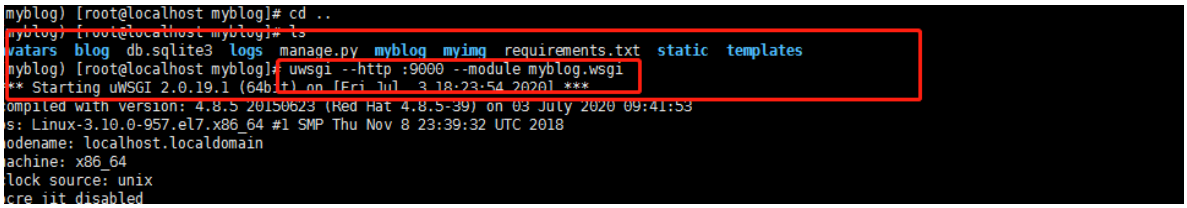


我自己的启动命令是：

```
# 说明是启动myblog这个文件夹下的这个wsgi文件，启动项目用module，启动文件用file
uwsgi --http :9000 --module myblog.wsgi
```

进入到项目的manage.py层面，运行,指定端口为9000

```
(myblog) [root@localhost myblog]# uwsgi --http :9000 --module myblog.wsgi
```

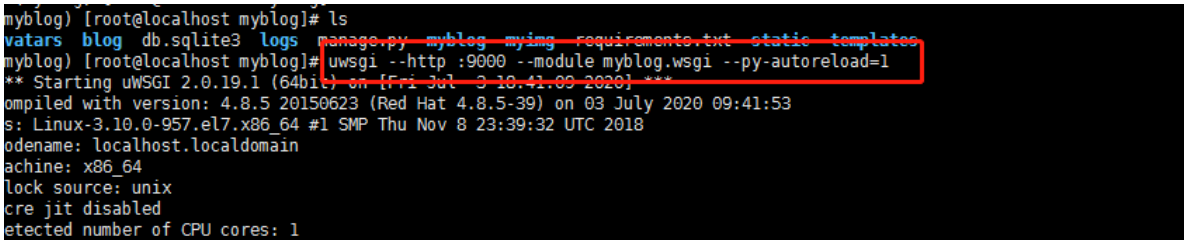


浏览器当前ip+自己指定端口9000，发现没有css等基本样式,下一次运行有了css样式

```
http://192.168.1.100:9000/
```

使用uwsgi热加载来启动项目，启动成功

```
uwsgi --http :9000 --module myblog.wsgi --py-autoreload=1
```



使用uwsgi配置文件启动django项目

创建一个配置文件uwsgi.ini(注意，这个配置文件不管放在哪里都可以，但是启动的时候，需要找到这个配置文件)
我放在 myblog/myblog 这个文件夹下


```
vim uwsgi.ini

#socket和http任选其一  WORKON_HOME=~/Envs
#我安装虚拟环境的时候设置了安装路径     ~/Envs/myblog,但是这里的home 路径却是 /root,
命令行  cd /root  是有Envs目录的
[uwsgi]
chdir           = /myblog/myblog/
module          = myblog.wsgi
home            = /root/Envs/myblog
master          = true
processes       = 1
socket          = 0.0.0.0:9000
#http            = 0.0.0.0:9000
vacuum          = true
```

过指定uwsgi.ini配置文件把django跑起来(myblog的ini文件在myblog/myblog/)

```
uwsgi uwsgi.ini
```

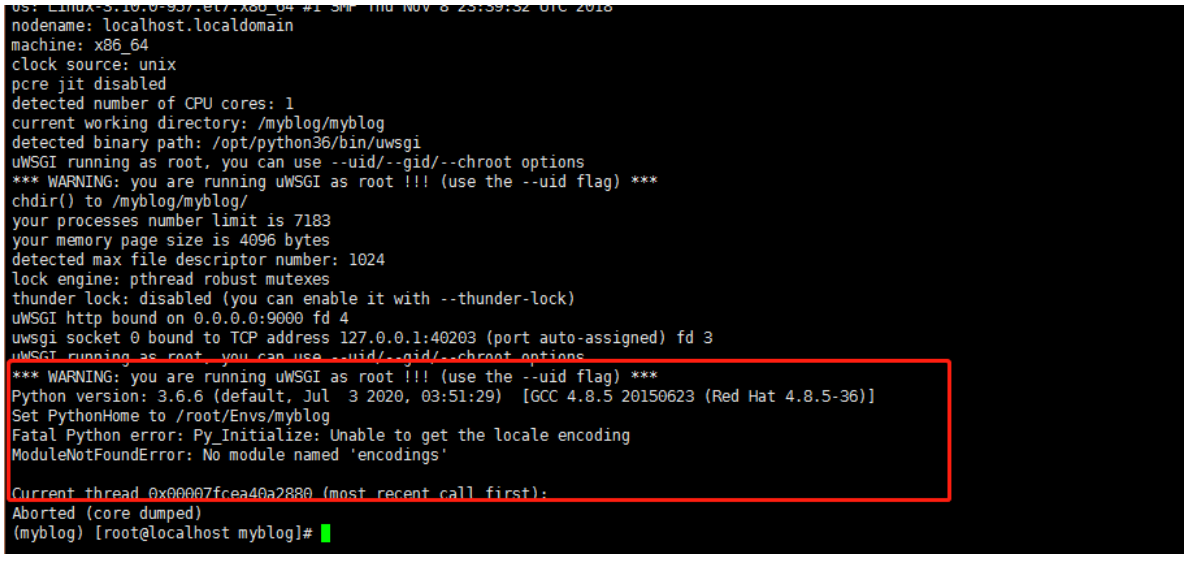
前端会显示"该网页无法正常运作"

只使用uwsgi.ini 启动django项目的时候，前端使用线上服务器加端口访问的时候，前端会显示"该网页无法正常运作" 这是因为，只使用uwsgi配置的时候，应该选择 "运行一个http服务端，就用这个http参数",当然现实的时没有css样式

```
有时配置好uwsgi.ini后，前端
#如果你使用了nginx，做反向代理，必须填写socket链接，而不是http参数
socket          = 0.0.0.0:8000
#如果你不用nginx，直接使用uwsgi，运行一个http服务端，就用这个http参数
http = 0.0.0.0:8000
```

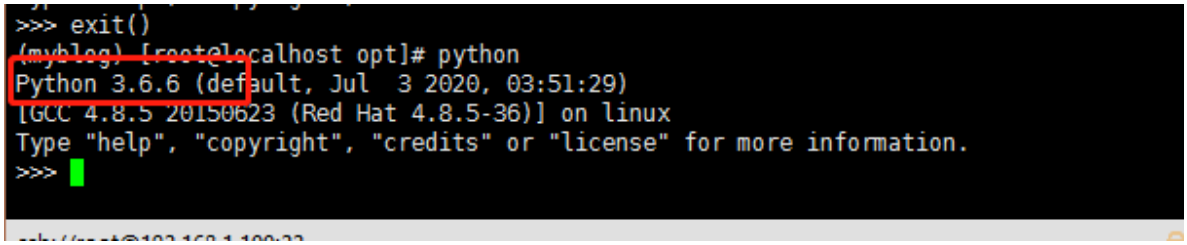
此时启动报错：

```
*** WARNING: you are running uWSGI as root !!! (use the --uid flag) ***
Python version: 3.6.6 (default, Jul  3 2020, 03:51:29)  [GCC 4.8.5 20150623 (Red
Hat 4.8.5-36)]
Set PythonHome to /root/Envs/myblog
Fatal Python error: Py_Initialize: Unable to get the locale encoding
ModuleNotFoundError: No module named 'encodings'

Current thread 0x00007fcea40a2880 (most recent call first):
Aborted (core dumped)
```



出现的原因：

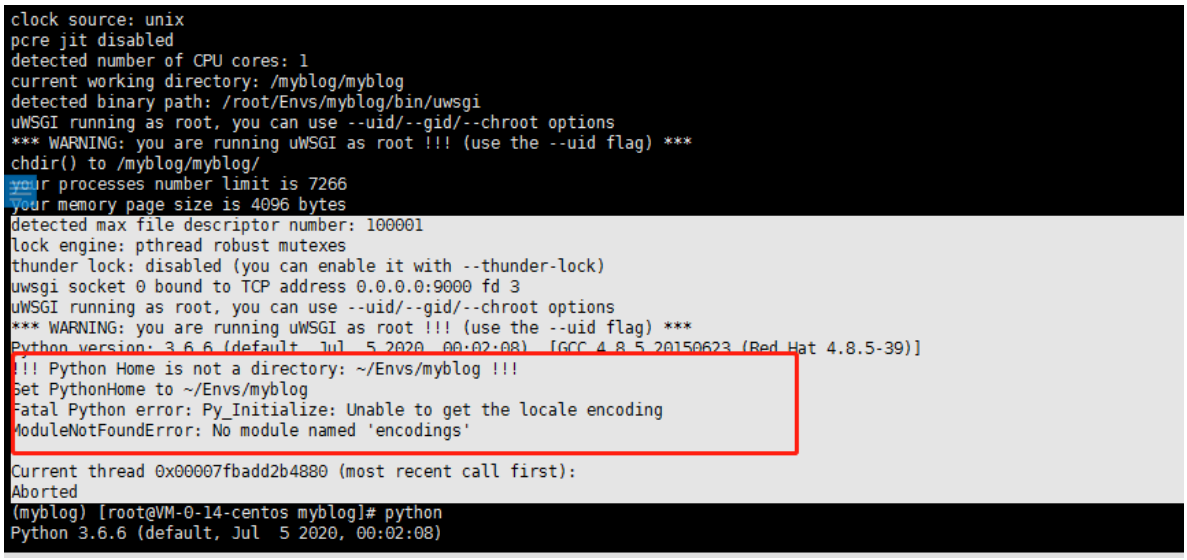
```
因为这里使用的时centos自带的python2，不是我指定的python3，需要在创建虚拟环境的时候指定使用python3
所以需要修改默认的python解释器
参考链接：https://www.jianshu.com/p/1193b1dbaf95
但是在换成解释器后，再创建虚拟环境的时候，会报错，所以我只能重新安装虚拟环境和虚拟环境virtualevewrap
然后创建虚拟环境，重新下载项目需要的安装包。
这时可以测试在虚拟环境下 查看    pyhont版本

上诉的解决方案：
```




```
Fatal Python error: Py_Initialize: Unable to get the locale encoding
ModuleNotFoundError: No module named 'encodings'
```

也出现了这个错误：

```
detected max file descriptor number: 100001
lock engine: pthread robust mutexes
thunder lock: disabled (you can enable it with --thunder-lock)
uwsgi socket 0 bound to TCP address 0.0.0.0:9000 fd 3
uWSGI running as root, you can use --uid/--gid/--chroot options
*** WARNING: you are running uWSGI as root !!! (use the --uid flag) ***
Python version: 3.6.6 (default, Jul  5 2020, 00:02:08)  [GCC 4.8.5 20150623 (Red
Hat 4.8.5-39)]
!!! Python Home is not a directory: ~/Envs/myblog !!!
Set PythonHome to ~/Envs/myblog
Fatal Python error: Py_Initialize: Unable to get the locale encoding
ModuleNotFoundError: No module named 'encodings'

Current thread 0x00007fbadd2b4880 (most recent call first):
Aborted
```

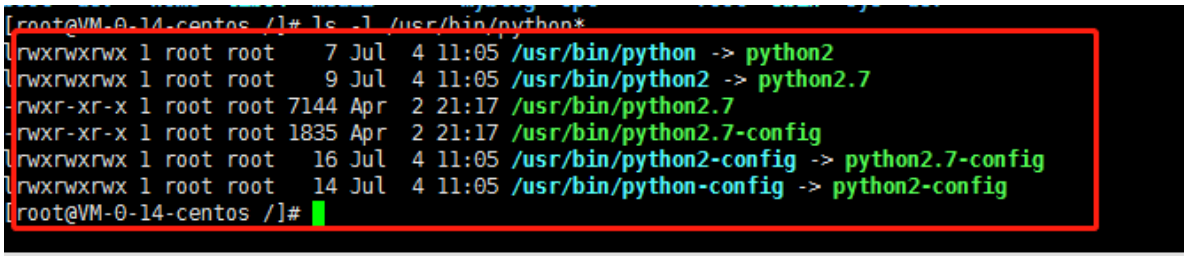



```
排查后发现可能是 虚拟环境的路径问题，修改为了
home               = /root/Envs/myblog
```

No module named 'encodings' 上诉的解决方案：

假如你的机器上有两个版本的python,如同时装有python2和python3,现在想要替换默认版本为python3,可以进行如下操作:

```
ls -l /usr/bin/python*
```



由图中文件的链接情况可知,在控制台中输入python和python2进入python2.7版本,
输入python3进入python3版本.
现在需要将第一个文件删除,然后把python3软链接到该目录下:

```
#查看python的链接
ls -l /usr/bin/python*

rm -rf /usr/bin/python    # 我的腾讯云不是删除 而是备份  cp  /usr/bin/python
python.bak ， 再删除这个python
ln -s /usr/local/bin/python3 /usr/bin/python
我的设置是：ln -s /opt/python36/bin/python3.6 /usr/bin/python
```

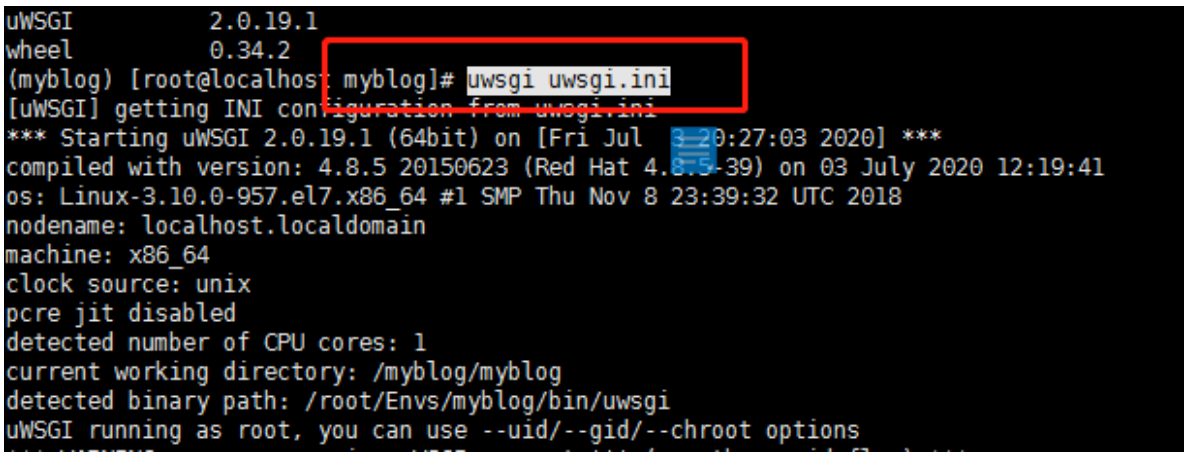
再次使用 uwsgi uwsgi.ini启动可能还会报encoding的错误，可能是python软链接的问题

```

```

接下来按照之前安装的教程就可以了。

重新执行uwsgi 配置文件来启动django项目，可以执行成功，配置文件就按照上面的配置信息来

```
执行：uwsgi uwsgi.ini
```



但是发现在输出的日志信息碰到中文的时候会乱码，以后再处理这个问题吧

3、安装配置nginx实现nginx的代理,前提一定要在项目的settings.py 文件中加入

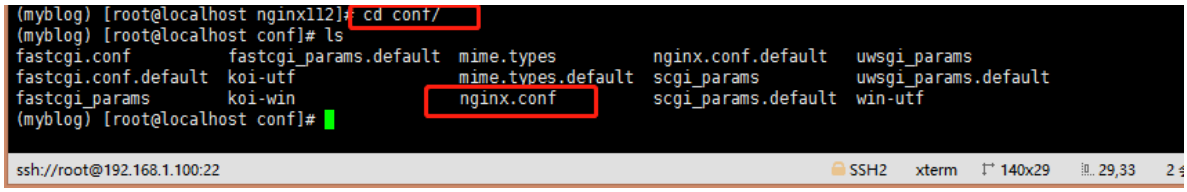
收集静态文件 ,修改settings.py配置文件， 加入以下一行配置
STATIC_ROOT='/opt/myblog/static'

并且要在项目根文件夹下 收集静态文件

我已经安装了nginx，在/opt/nginx112

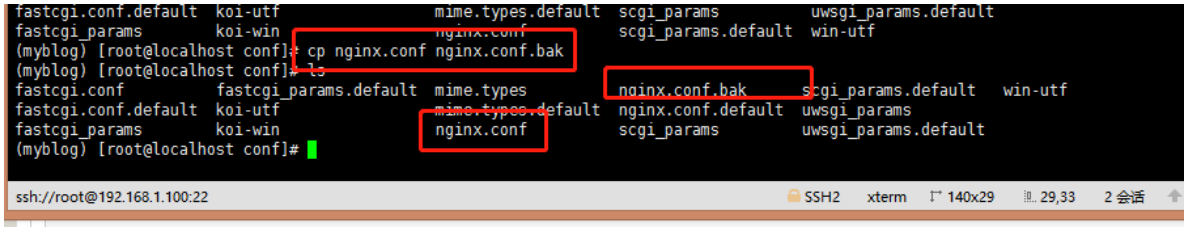
nginx.conf

```
cd /opt/nginx112/conf
```



先备份nginx.conf文件防止后续出错

```
cp nginx.conf nginx.conf.bak
```



所以我的myblog的nginx配置文件是：uwsgi_pass 127.0.0.1:9000; #端口要和uwsgi里配置的一样

nginx.conf

```
events {
    worker_connections  1024;
}
http {
    include       mime.types;
    default_type  application/octet-stream;
```

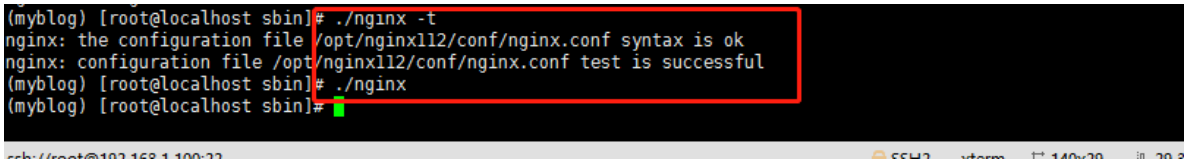
```
    sendfile        on;
    server {
        listen 80;
        server_name  192.168.1.100; #改为自己的域名，没域名修改为127.0.0.1:80
        charset utf-8;
        location / {
           include uwsgi_params;
           uwsgi_pass 127.0.0.1:9000;  #端口要和uwsgi里配置的一样
           uwsgi_param UWSGI_SCRIPT myblog.wsgi;  #wsgi.py所在的目录名+.wsgi
           uwsgi_param UWSGI_CHDIR /myblog/myblog/myblog/; #项目路径

        }
        location /static/ {
        alias /opt/myblog/static/; #静态资源路径
        }
    }
}
```

在项目的settings文件中需要写上项目的静态文件目录，当然也需要先收集静态文件到自己指定的static目录下，不然会出现502错误，配置后一定要重启nginx和uwsgi

配置好了后：

```
进入/usr/local/nginx/sbin/目录 (这个是自己的nginx安装目录)
执行 ./nginx -t 命令先检查配置文件是否有错，没有错就执行以下命令：
./nginx
```

```
cd /opt/nginx112/sbin
./nginx #启动
./nginx -s stop #关闭
./nginx -s reload # 平滑重启 ，修改了nginx.conf之后，可以不重启服务，加载新的配置
或者  /opt/nginx112/sbin/nginx -s reload  # 绝对路径平滑重启
```



然后在浏览器使用当前服务器的ip登陆，显示的geteway,可能是配置文件nginx.conf配置错误

```
192.168.1.100    # 不需要加8000端口
```

ps特别提醒:一直出现502页面，是因为，静态文件的路径的问题和，没有重启uwsgi.ini 文件和重启nginx，

在运行项目的时候，一定要确认uwsgi和nignx都是启动了的，否则会一直出现502的页面，这个问题我搞了好久,

还要将项目的settings.py的debug修改为false, Debug=False,host也需要修改为 *

```
#导出Mysql,django为你的数据库
mysqldump  -uroot  -ppassword  django>django.sql
#把django.sql上传到服务器，在服务器里用下面命令导入
mysql  -uroot  -ppassword
use  dajngo;
source  your  Path\django.sql
```

8、通过python3 manage.py runserver 运行一下项目，如果能正常启动则进行下一步，不能正常运行往上检查。

9、在项目根目录里添加uwsgi配置文件（参照上面第十三步）

10、配置Nginx配置文件。（参考上面第十四步）

留意：一定要注意Uwsgi和Nginx配置文件里的项目路径和静态资源路径，填写正确了才能成功访问。不然会出现502错误。还有就是，修改Django文件和其它配置文件之后，一定要重启Uwsgi和Nginx，不然不生效。

Uwsgi和Nginx重启方法：

```
#查看Uwsgi进程
ps  -ef|grep  uwsgi
#用kill方法把uwsgi进程杀死，然后启动uwsgi
killall  -9  uwsgi
#启动方法
uwsgi  -x  mysite.xml

#Nginx平滑重启方法
```

终端没有任何提示就证明nginx启动成功。可以使用你的服务器地址查看，成功之后就会看到一个nginx欢迎页面。

之后，在settings.py里设置：

1、关闭DEBUG模式。

```
DEBUG = False
```

2、ALLOWED_HOSTS设置为* 表示任何IP都可以访问网站。

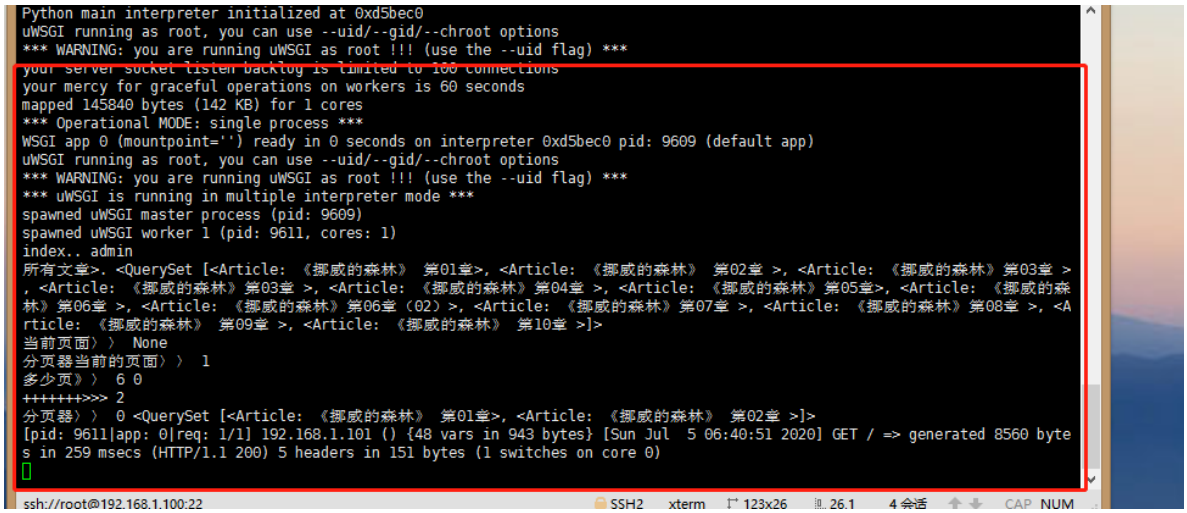
```
ALLOWED_HOSTS = ['*']
```

重启uwsgi和nginx
进入 自己存放uwsgi的目录，使用
uwsgi uwsgi.ini 命令启动uwsgi，
然后进入nginx的安装目录下的sbin 目录，使用 ./nginx -t 先检查nginx.conf配置文件是否有误，如果没有报错提示，则：
./nginx 启动
或则：
./nginx -s reload 平滑重启

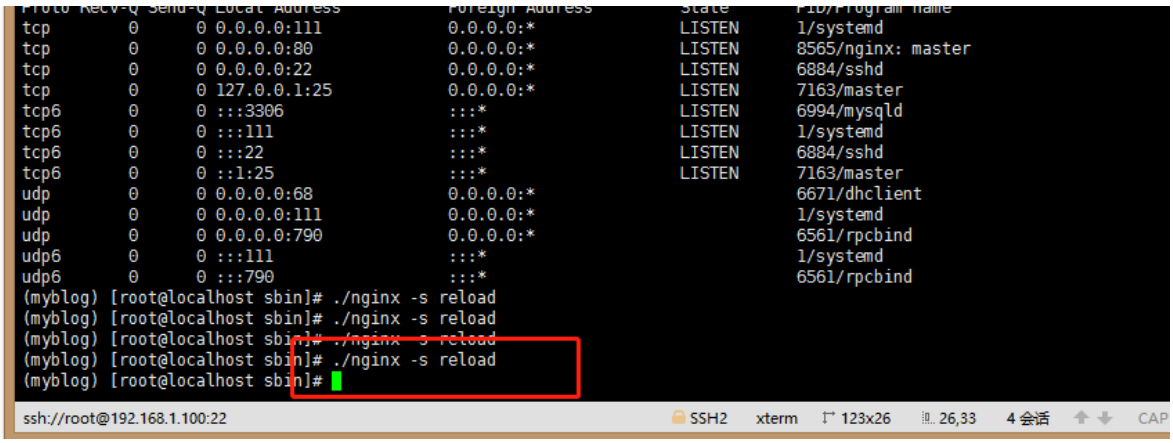
nginx.conf的配置文件的端口一定要和uwsgi.ini的配置文件 的端口一致

nginx.conf的配置文件的端口一定要和uwsgi.ini的配置文件 的端口一致

uwsgi启动页面：



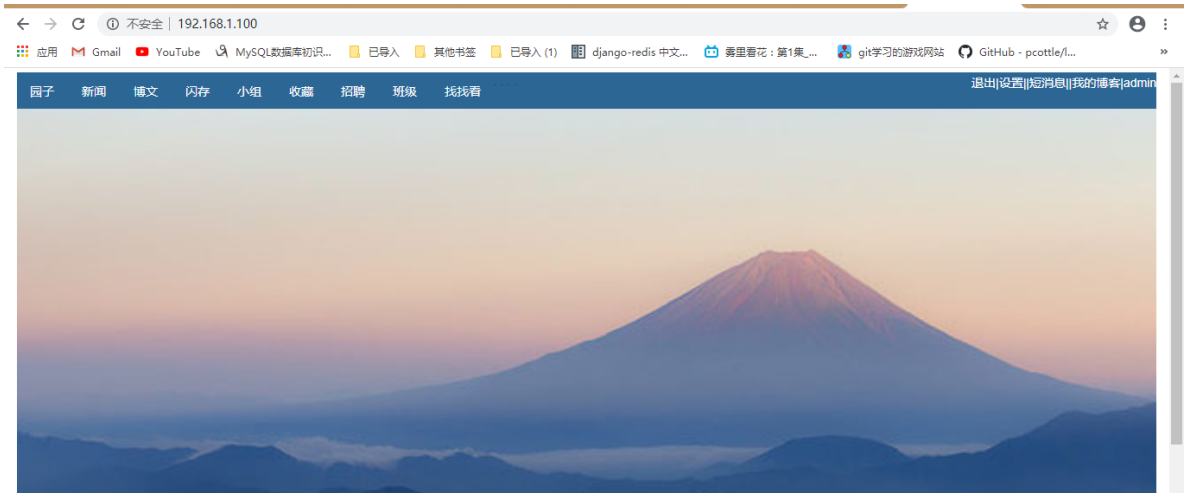
nginx 启动页面：



使用电脑的ip 访问

192.168.1.100

前端访问页面：



可以正常启动后，访问前端会出现访问admin页面的时候，admin页面没有样式，就像这样

解决方案：

网上的解决方案：

关于线上部署admin后台样式没有生效的问题：

方法一：

1、在settings.py尾部：

```
STATIC_ROOT    =  os.path.join(BASE_DIR,  'static')#指定样式收集目录
#或
STATIC_ROOT  =  '/www/mysite/mysite/static'     #指定样式收集目录
```

2、收集CSS样式，在终端输入：

```
python  manage.py  collectstatic
```

运行这个命令之后，就会自动把后台CSS样式收集到/static/目录下。刷新页面就能恢复样式！

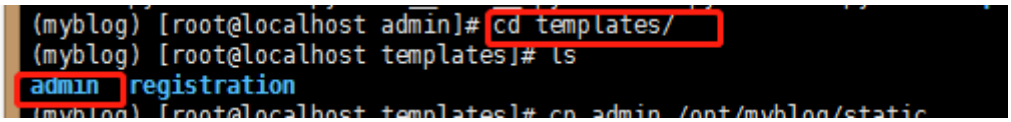
方法二：

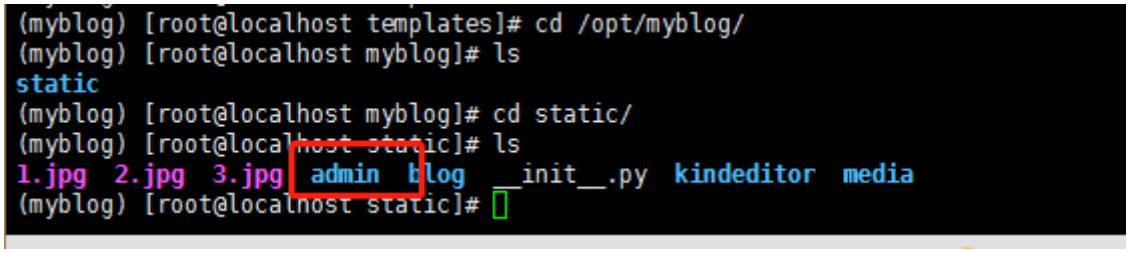
在Python安装目录下（如果使用虚拟环境，则在虚拟环境目录下）找到\Lib\site-packages\django\contrib\admin\templates目录，把里面的admin目录复制到指定目录即可。

注意：收集或复制前一定先在settings里配置并指定STATIC_ROOT路径，static/ 个目录可以自己定。指定的时候一定要在settings.py和nginx里指定新的路径。不然无法生效。

将/opt/python36/lib/python3.6/site-packages/django/contrib/admin/templates/ 下面的这个admin文件夹复制到之前专门收集静态文件的目录。我的时/opt/myblog/static

```
cd /opt/python36/lib/python3.6/site-packages/django/contrib/admin/templates/

然后    cp -r admin /opt/myblog/static
```





之后可能会需要修改nginx.conf

完整版

```
events {
    worker_connections  1024;
}
http {
    include       mime.types;
    default_type  application/octet-stream;
    sendfile        on;
    server {
        listen 80;
        server_name  192.168.1.100; #改为自己的域名，没域名修改为127.0.0.1:80
        charset utf-8;
        location / {
           include uwsgi_params;
           uwsgi_pass 127.0.0.1:9000;  #端口要和uwsgi里配置的一样
           uwsgi_param UWSGI_SCRIPT myblog.wsgi;  #wsgi.py所在的目录名+.wsgi
           uwsgi_param UWSGI_CHDIR /myblog/myblog/myblog/; #项目路径

        }
        location /static/ {
        alias /opt/myblog/static/; #静态资源路径
        }
    }
}
```

```
(myblog) [root@localhost conf]# vim nginx.conf
(myblog) [root@localhost conf]# cat nginx.conf
events {
    worker_connections  1024;
}
http {
    include       mime.types;
    default_type  application/octet-stream;
    sendfile        on;
    server {
        listen 80;
        server_name  192.168.1.100; #改为自己的域名，没域名修改为127.0.0.1:80
        charset utf-8;
        location / {
           include uwsgi_params;
           uwsgi_pass 127.0.0.1:9000;  #端口要和uwsgi里配置的一样
           uwsgi_param UWSGI_SCRIPT myblog.wsgi;  #wsgi.py所在的目录名+.wsgi
           uwsgi_param UWSGI_CHDIR /myblog/myblog/myblog/; #项目路径

        }
        location /static/ {
        alias /opt/myblog/static/; #静态资源路径
        }
    }
}
(myblog) [root@localhost conf]#
```

主要是这里需要写绝对的 静态文件目录 路径

然后重启nginx和uwsgi，使用uwsgi和nginx部署后，访问网站不需要加端口，直接ip访问就可以了

```
uwsgi –ini uwsgi.ini
./nginx -s reload
 重启之后就可以了
```

如果直接使用ip无法访问，显示是502 Bad Gateway或则访问的时候没有显示样式，则需要参考下面信息

```
有时配置好uwsgi.ini后，前端
#如果你使用了nginx，做反向代理，必须填写socket链接，而不是http参数
socket           = 0.0.0.0:8000
#如果你不用nginx，直接使用uwsgi，运行一个http服务端，就用这个http参数
http = 0.0.0.0:8000
```

博客项目的nginx.conf 和uwsgi的配置文件内容

uwsgi.ini

```
[uwsgi]
chdir           = /myblog/myblog/
module          = myblog.wsgi
home            = /root/Envs/myblog
master          = true
processes       = 1
 socket          = 0.0.0.0:9000
# http            = 0.0.0.0:9000
vacuum          = true
~
```

nginx.conf

```
events {
    worker_connections  1024;
}
http {
    include       mime.types;
    default_type  application/octet-stream;
    sendfile        on;
    server {
        listen 80;
        server_name  134.175.176.119; #改为自己的域名，没域名修改为127.0.0.1:80
        charset utf-8;
        location / {
           include uwsgi_params;
           uwsgi_pass 134.175.176.119:9000;  #端口要和uwsgi里配置的一样
           uwsgi_param UWSGI_SCRIPT myblog.wsgi;  #wsgi.py所在的目录名+.wsgi
           uwsgi_param UWSGI_CHDIR /myblog/myblog/myblog/; #项目路径

        }
        location /static/ {
```

```
        alias /opt/myblog/static/; #静态资源路径
        }
    }
}
```

三、使项目在云服务器后台常驻，nohup

ps最最重要的步骤,当我将项目部署完成后 ，使用xshell进行nginx和uwsgi启动后，在xshell终端界面运行的时候访问是没有问题的，但是关闭终端后，再去访问就访问不到了，我不能一直开着电脑啊；所以现在使用nohup命令进行后台运行，即使关闭xshell，也能访问到项目

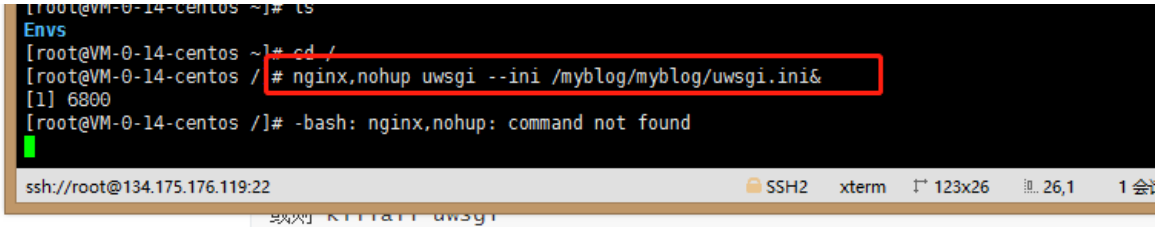
01、使用方法：

cd nginx的的启动文件夹
先启动nginx，为了防止说抵制使用，先kill所有uwsgi和nginx的pid

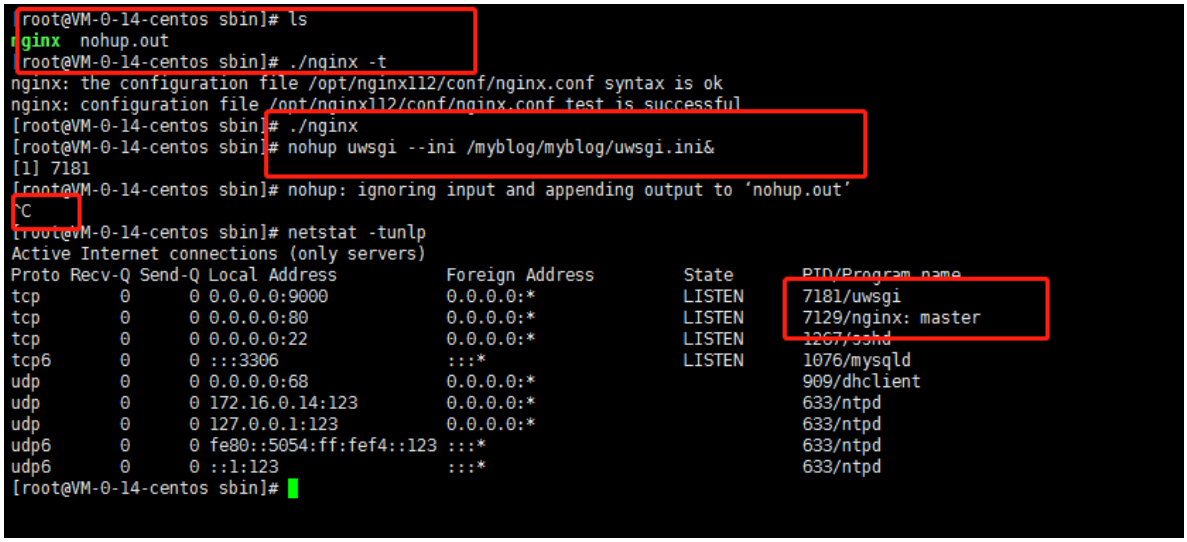
02、启动nginx

启动先查看配置文件是否填写正常
./nginx -t # 如果没报错，则启动正常
./nginx # 启动nginx，./nginx -s reload 平滑重启nginx，就算修改配置文件也不会断掉

直接在root终端使用 nginx,nohup uwsgi --ini /myblog/myblog/uwsgi.ini& 无法直接启动项目



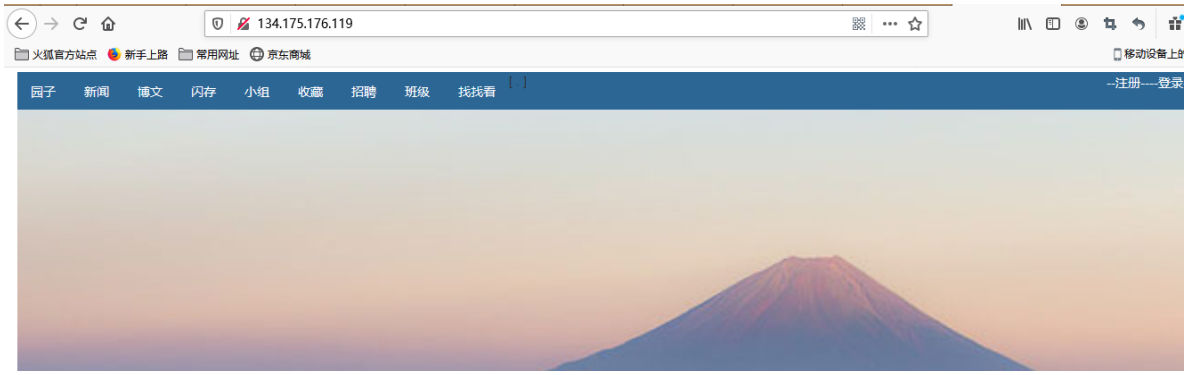
所以我选择先进入nginx目录，先启动nginx，再启动uwsgi，因为我知道自己的uwsi.ini 的文件路径



3、使用nohup进行后台常驻

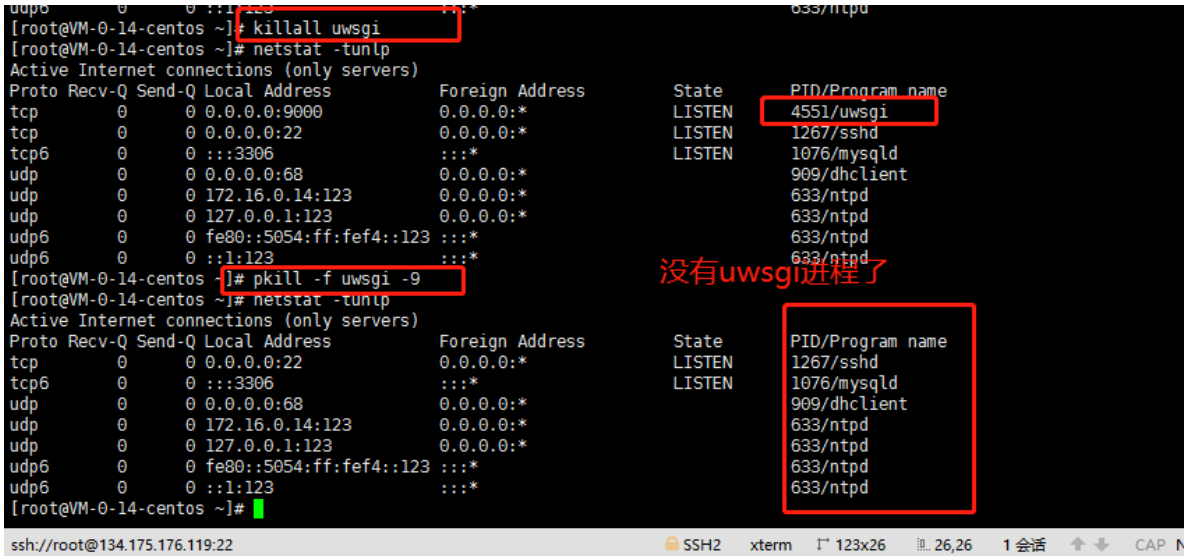
```
先进入nginx启动目录启动nginx，在按照下面的命令启动uwsig.ini，
nohup uwsgi --ini /myblog/myblog/uwsgi.ini&          # 后面是自己配置的uwsgi配置文件的路径
```

关闭xshell然后自己的网址ip,访问ok



04、需要停止的话

```
netstat -tunlp    #查看所有的nginx和uwsgi的端口
不要启动的话，就  kill  pid(进程id)  杀死进程

或则 killall uwsgi
    killall nginx

如果出现 kill 掉uwsgi进程，则使用 pkill -f uwsgi -9  杀死
```



四、网站后期是需要不断更新代码和功能的，可以选择使用github或则gitee，将代码放到上面，然后服务器直接使用git] clone，git pull进行不断的更新

每次修改代码后，更新到服务器上也很简单。在**虚拟环境**中并**进入项目目录**，依次（collectstatic 和 migrate 是可选的）执行以下命令：

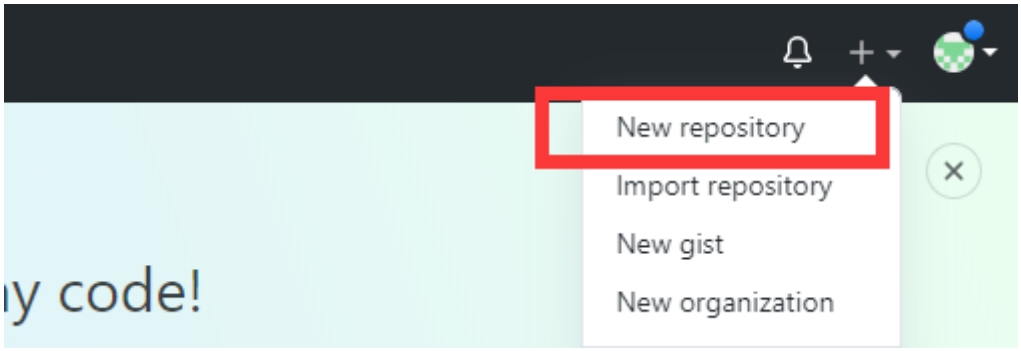
```
git pull origin master
python3 manage.py collectstatic
python3 manage.py migrate
# 重启 uwsgi
killall uwsgi
然后 uwsgi 启动命令
```

如果你更改了 Nginx 的配置文件，还需要重启 Nginx 服务：

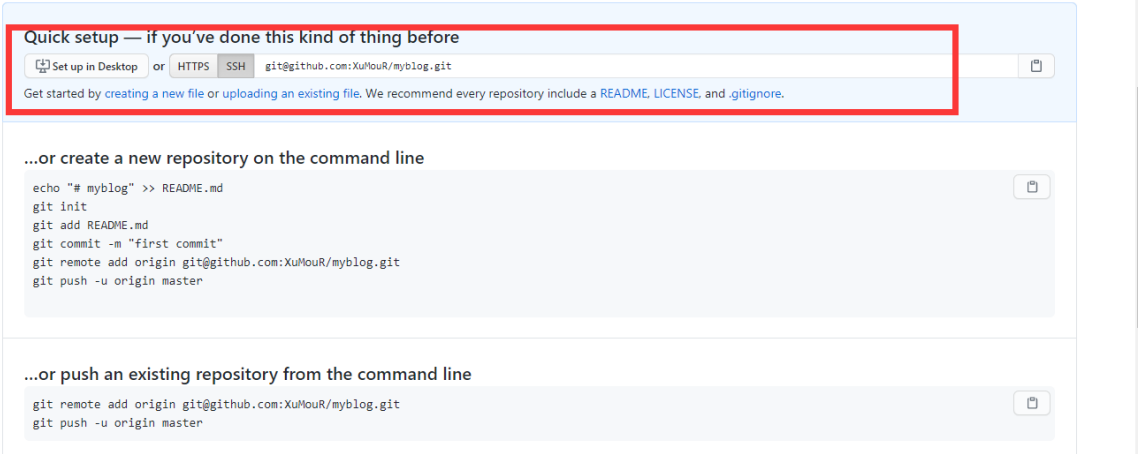
```
./nginx -s reload
```

五、使用github进行项目托管，并将项目上传到github私有仓库

第一步：在github创建私有仓库



然后创建选择在、私人仓库就可以了，然后会显示页面



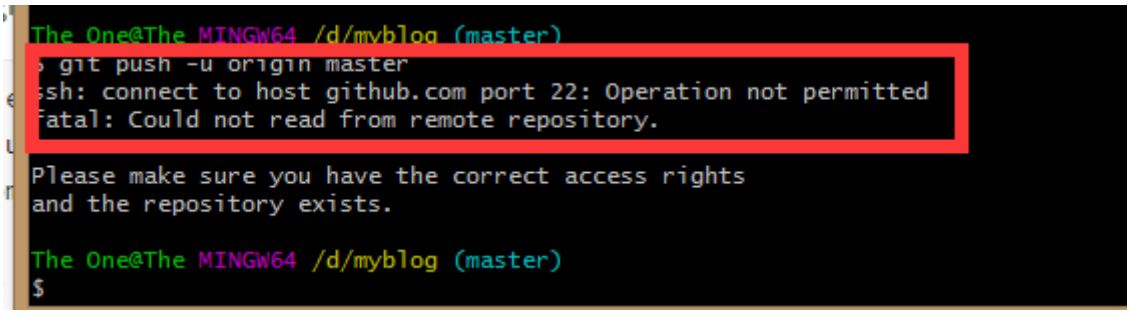
第二步、将本地的myblog项目进行上传

在项目文件中依次执行下面的命令

```
echo "# myblog" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin git@github.com:XuMouR/myblog.git
git push -u origin master
```

我在执行了 git remote add origin git@github.com:XuMouR/myblog.git 后报错

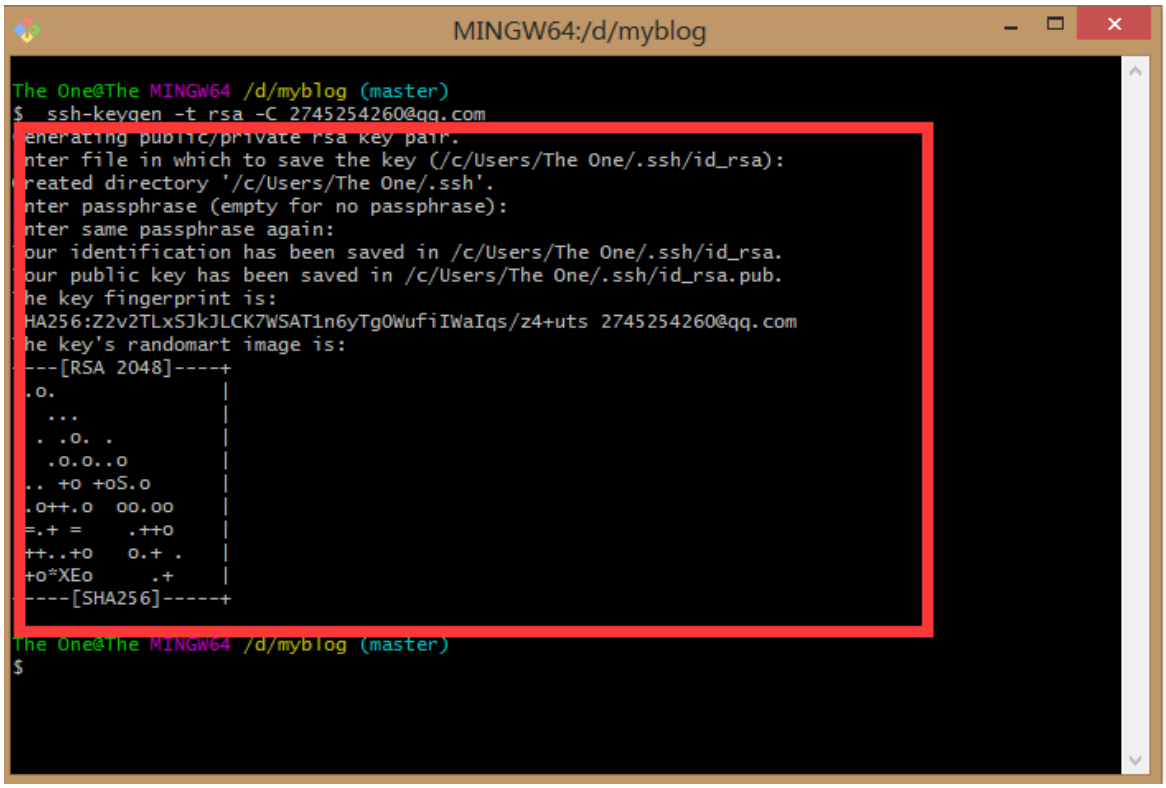
```
$ git push -u origin master
ssh: connect to host github.com port 22: Operation not permitted
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.
```



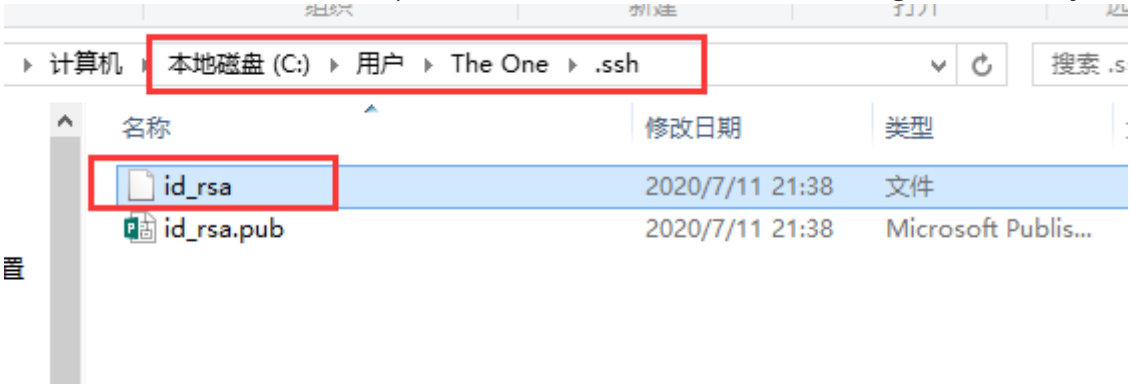
错误原因是因为我使用的时ssh，所以需要配置密钥

先生成密钥：直接用默认的就可以了

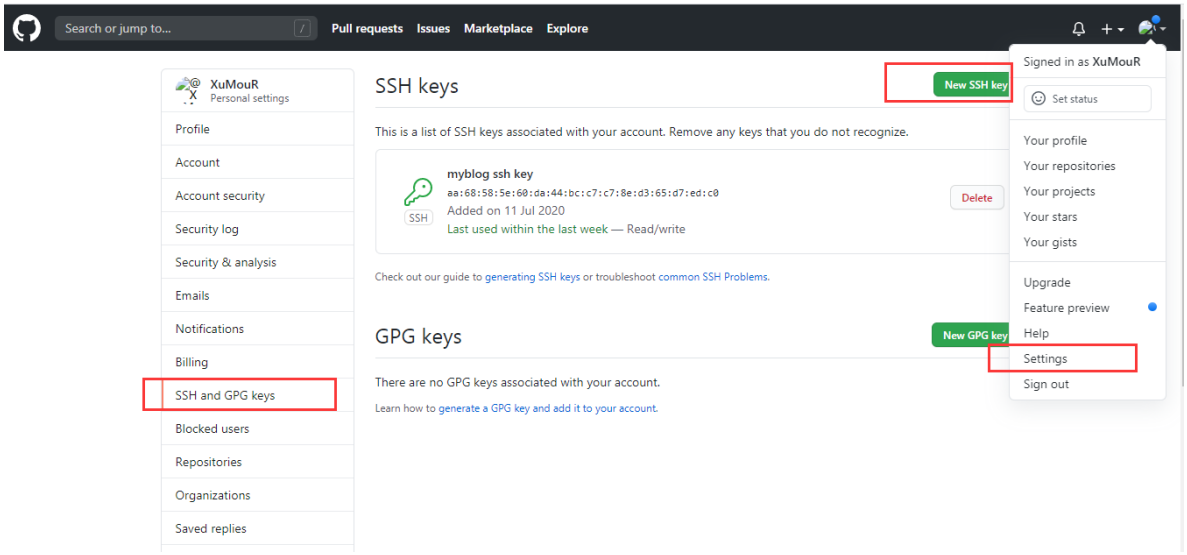
```
ssh-keygen -t rsa -C 2745254260@qq.com
```

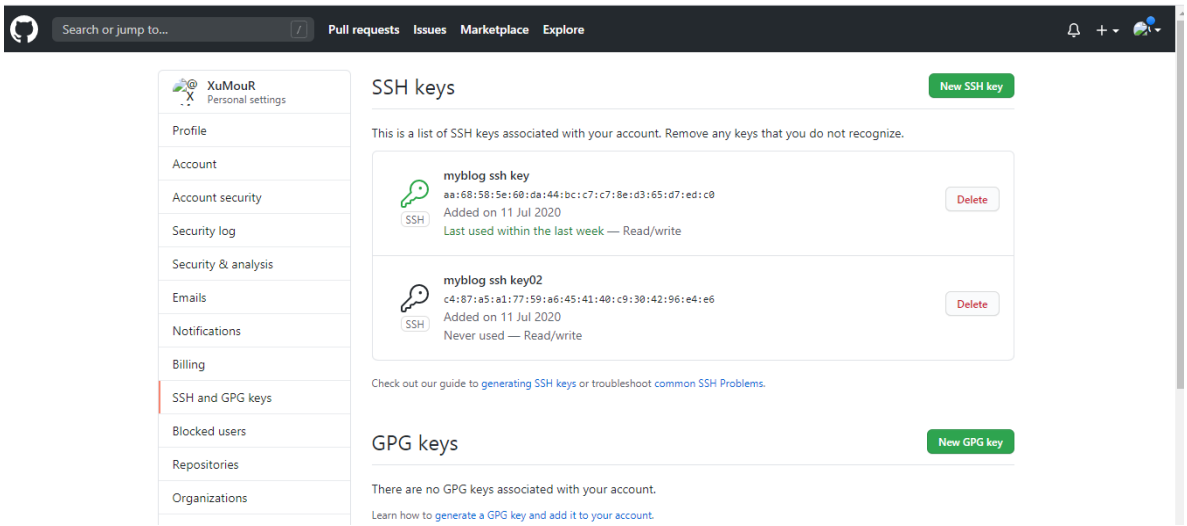


然后在它指示的目录中找到id_rsa.pub 的这个公钥文件，将里面的密钥复制到github的ssh key中



置





然后我再使用git push 发现还是上面的报错，就算换成https 也是一样的报错

```
$ git push -u origin master
ssh: connect to host github.com port 22: Operation not permitted
fatal: Could not read from remote repository.
```

最后实在找不到解决方案：

001、换成了https 来进行远程仓库链接

```
先查看先前的协议链接
$ git remote -v
origin  git@github.com:unlimitbladeworks/Data-Struts-Learning.git (fetch)
origin  git@github.com:unlimitbladeworks/Data-Struts-Learning.git (push)

# 移除远程仓库配置
git remote rm origin
```

002、重新添加远程仓库配置，使用https形式

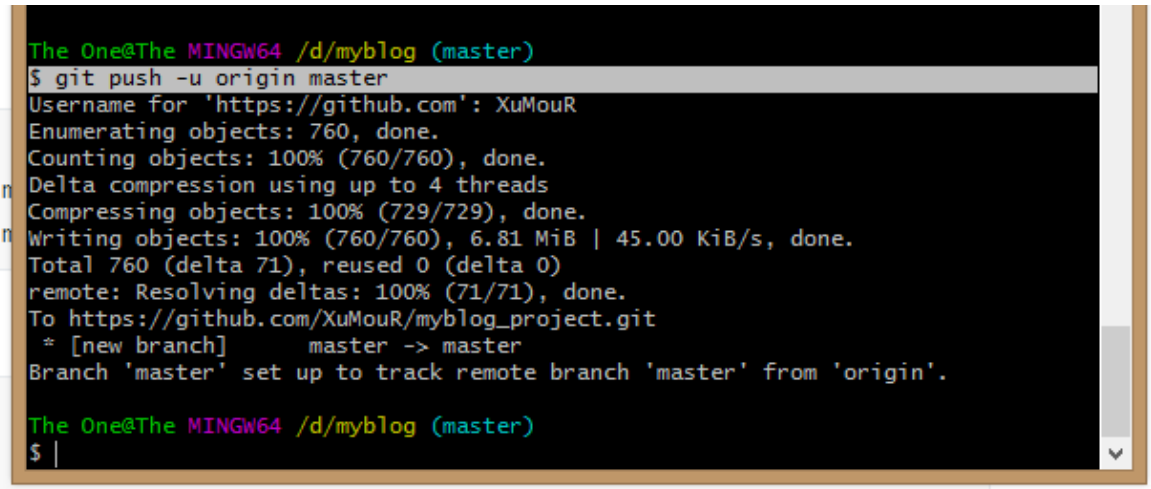
```
git remote add origin https://github.com/unlimitbladeworks/Data-Struts-
Learning.git
```

再次查看:

```
git remote -v
origin  https://github.com/unlimitbladeworks/Data-Struts-Learning.git (fetch)
origin  https://github.com/unlimitbladeworks/Data-Struts-Learning.git (push)
```

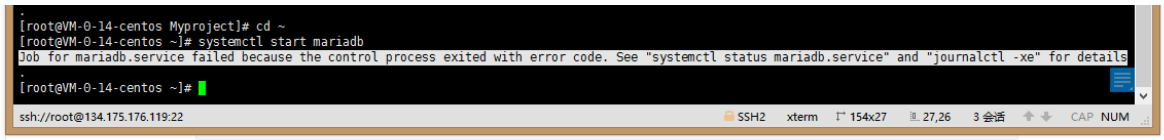
然后执行pull

```
git pull
$ git push -u origin master
```



六、重启服务器后再启动 mysql 时，出现报错信息

```
Job for mariadb.service failed because the control process exited with error
code. See "systemctl status mariadb.service" and "journalctl -xe" for details
```



网上的参考：我的/etc/my/cnf 事先备份为 my_bak.cnf

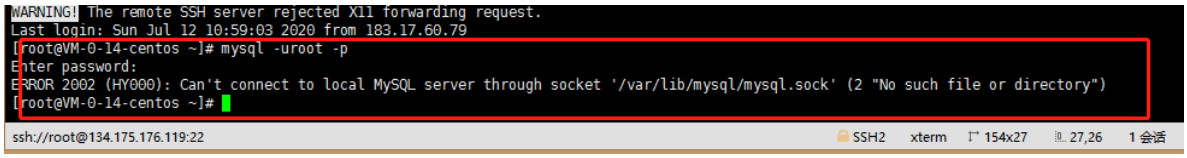
```
cp /usr/share/mysql/my-huge.cnf /etc/my.cnf

cp: overwrite ‘/etc/my.cnf’? y

之后执行

systemctl start mariadb.service

mariadb服务启动成功
```

无效，还是报一样的错

登陆mysql时：mysql -uroot -p

提示错误：

```
ERROR 2002 (HY000): Can't connect to local MySQL server through socket
'/var/lib/mysql/mysql.sock' (2 "No such file or directory")
```



查看mysql是否启动

```
service mysql status

systemctl status mariadb
```

服务端没启动top