Configuration of the installation of python in server with linux os.

- Step 0. Make the connection of each node. And load them with root

- Step 1. Prepare the Installation files into the /usr/local/python36 folder.

```
cp -r /home/labcompute/GaoMY/PYTHONLINUX/* /usr/local/python36/
```

- Step 2. Unzip the Python-3.6.1.tgz

```
cd /usr/local/python36/
tar -zxvf Python-3.6.1.tgz
```

- step 3. Get into the ~/Python-3.6.1 run these lines of code:

```
./configure -prefix=/usr/local/python36/Python-3.6.1
make
rpm -i zlib(with version name).rpm
(install zlib, it lies in ~/python36)
make install
```

- step 4. Line the python and pip with command run these two lines of code:

```
ln -s /usr/local/python36/Python-3.6.1/bin/python3.6 /usr/local/bin/python3


ln -s /usr/local/python36/Python-3.6.1/bin/pip3.6 /usr/local/bin/pip
```

Till now , the basic python is installed. Then continue with the intel MKL.

- step 5. Installation of MKL

  1. Change directory back to ~/python36: cd /usr/local/python36
  2. Unzip the MKL: tar -zxvf l_MKL(with version info).gz
  3. run the shell then follow the installation wizard to finish the installation of the MKL : ./install.sh\v
- step6. Add MKL lib into the path

  1.run: vi /etc/profile 2.press 'i' and Add two line at the end: export PATH=":/opt/intel/bin:$PATH" export LD$LIBRARY$PATH=$LD$LIBRARY$LIB:/opt/intel/compilersand libraries_2017.4.196/linux/mkl/lib/intel64 3.press 'esc', then press ':',then type'wq', then press 'enter' to save 4.run: source /etc/profile

- step7. Install the MKL_python distribution same with step 5

- step8. Install this list of python packages with this order

```
pip install numpy-1.13.0-cp36-cp36m-manylinux1_x86_64.whl &
pip install pyparsing-2.2.0-py2.py3-none-any.whl &
pip install six-1.10.0-py2.py3-none-any.whl &
pip install python_dateutil-2.6.0-py2.py3-none-any.whl &
pip install cycler-0.10.0-py2.py3-none-any.whl &
pip install pytz-2017.2-py2.py3-none-any.whl &
pip install matplotlib-2.0.2-cp36-cp36m-manylinux1_x86_64.whl &
pip install scikit_learn-0.18.1-cp36-cp36m-manylinux1_x86_64.whl &
pip install pandas-0.20.2-cp36-cp36m-manylinux1_x86_64.whl &
pip install scipy-0.19.0-cp36-cp36m-manylinux1_x86_64.whl &
pip install patsy-0.4.1-py2.py3-none-any.whl &
pip install statsmodels-0.8.0-cp36-cp36m-manylinux1_x86_64.whl &
```

- step9. Checklis for Python package

```
cycler (0.10.0)
matplotlib (2.0.2)
numpy (1.13.0)
pandas (0.20.2)
patsy (0.4.1)
pip (9.0.1)
pyparsing (2.2.0)
python-dateutil (2.6.0)
pytz (2017.2)
scikit-learn (0.18.1)
scipy (0.19.0)
setuptools (28.8.0)
six (1.10.0)
statsmodels (0.8.0)
```