

Before deploying the code into Debian machine and make it executable, the following are needed:

1- make sure that python (2.7 as an example) is installed, if not installed then hit the following commands in a Terminal (admin access)

- `sudo apt-get update`
- `sudo apt-get install -y python`

2-make sure that git (if used as version control system) is installed, if not installed then hit the following command in a Terminal:

- `sudo apt-get install -y git`

git will be used to pull my files from github as an example

3- create a folder (as an example var/www/test) and pull my files to it

4- change the directory to var/www/test

5- hit in terminal: `python test_with_timerThread.py "url_file2"`. This script runs the required steps and repeats it every 5 minutes (the user should replace "url\_file2" with the file name he has). The other file "test\_without\_timerThread.py" has no timer thread, and in order to run it every 5 minutes, crontab concept can be used. In this case, testcron.cron cron file must be used. It contains the command to run python script every 5 minutes in the background of debian linux machine: `* /5 * * * * python var/www/test/test_without_timerThread.py "url_file2"`. This command should be adapted to refer to the path of python script file and to the plain text file. To run the crontab file just hit in terminal: `crontab test.cron`

However, if it is meant that the Debian machine will run the code via http url from a web server (Apache server as an example), in this case Python CGI can be used, this needs some more configurations:

1- make sure that python (2.7 as an example) is installed, if not installed then hit the following commands in a Terminal (admin access)

- `sudo apt-get update`
- `sudo apt-get install -y python`

2- make sure that Apache server is installed in the debian machine, if not installed then hit the following commands:

- `sudo apt-get update`
- `sudo apt-get install apache2`

3- now the configuration of Apache server must be configured to make it able to handle CGI. Please refer to (<https://httpd.apache.org/docs/2.4/howto/cgi.html>)

4- make sure that git (if used as version control system) is installed, if not installed then hit the following command in a Terminal:

- `sudo apt-get install -y git`

git will be used to pull the my code from github as an example

5- create a folder (as an example var/www/test) and pull my app to it

6- then by hitting [http://localhost/var/www/test\\_with\\_timer\\_thread.py](http://localhost/var/www/test_with_timer_thread.py) in the web browser, the py code will run. If the argument must be passed to the py CGI code, then this reference (<https://mail.python.org/pipermail/tutor/2002-September/017255.html>) can be used to adapt the code and the url accordingly