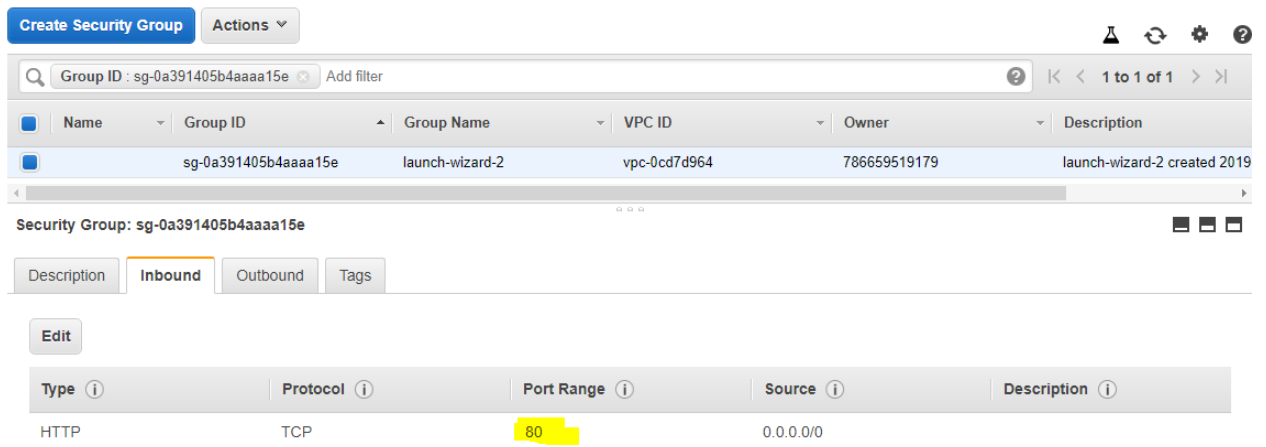# Cloud Computing Assignment-1

Steps to establish Python with a wsgi server and host behind Apache/Ngnix on port 80:

- Launch an EC2 instance on Port 80

- Install Apache webserver and mod_wsgi

```
$ sudo apt-get update
$ sudo apt-get install apache2
$ sudo apt-get install libapache2-mod-wsgi
```

- Install the framework ,I used Flask
- Create a .WSGI file to load the app

```
import sys
sys.path.insert(0, '/var/www/html/flaskapp')

from flaskapp import app as application
```

- Enable mod_wsgi in Apache configuration file

```
/etc/apache2/sites-enabled/000-default.conf
```

- Restart the webserver
- Test for configuration

Steps to enable HTTPS:

1. Create an SSL certificate

```
$sudo openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout
/etc/ssl/private/apache-selfsigned.key -out
/etc/ssl/certs/apache-selfsigned.crt
```

2. Configure Apache to use SSL
3. Modify the default Apache SSL virtual host file
4. Modify the unencrypted Virtual host file to redirect to HTTPS
5. Enable the changes in Apache
6. Restart the webserver
7. Test the configuration