

## How to run

In this assignment, we stop all the routers manually, the **stop** method isn't called because it's a little complex to decide when we get the stable forwarding table we want and that part is not important to our routing algo.

All the screenshots are in the **screenshots.zip**. And In the **Assignment6 Answer.pdf**, you could see the explanation about screenshots.

If there're too many logs in console, you may want to use some command to store all the output logs into a file before start routers to avoid losing earliest logs.

## Small Network

### Case 1-1

1. Start all routers

```
python start_router.py config/small-1
python start_router.py config/small-2
python start_router.py config/small-3
```

2. Wait and check the logs on the console, when they are stable, ie, not change for a while, typically within 5 seconds, check the log for the forwarding tables.
3. Stop all the routers manually. Check the log in console.

### Case 1-2

1. Start all routers

```
python start_router.py config/small-1
python start_router.py config/small-2
python start_router.py config/small-3
```

2. Wait and check the logs on the console, when they are stable, ie, not change for a while, typically within 5 seconds.
3. Change the file **config/small-1**, in line 2, **2,4** to **2,60**.
4. Wait and check the logs on the console, when they are stable, ie, not change for a while, typically within 5 seconds.
5. Change the file **config/small-1**, in line 2, **2,60** to **2,4**.
6. Wait and check the logs on the console, when they are stable, ie, not change for a while, typically within 5 seconds.
7. Stop all the routers manually. Check the log in console.

# Large Network

1. Start all routers

```
python start_router.py config/large-1
python start_router.py config/large-2
python start_router.py config/large-3
python start_router.py config/large-4
python start_router.py config/large-5
python start_router.py config/large-6
python start_router.py config/large-7
python start_router.py config/large-8
python start_router.py config/large-9
python start_router.py config/large-10
```

2. Wait and check the logs on the console, when they are stable, ie, not change for a while, typically within 5 seconds, check the log for the forwarding tables.
3. Stop all the routers manually. Check the log in console.