# Lab 4 Demo Questions

## Part 1. Explain your code. (30%)

Preparation:

Please show your code with an editor.

Questions:

1. How does your application receive the JSON file information? (7.5%)

2. How does your application install Group and Meter? (7.5%)

3. How does your application use intents to install flow rules? (7.5%)

4. If s1-s2 link is up and s1-s4 link is down, can h1 ping h2? Why is that? (7.5%)

## Part 2. Answer questions (30%)

1. Please explain the difference between FlowObjectiveService, FlowRuleService and IntentService when using them to install flow rules. (10%)

2. What are the four types of group? What are the differences between them? (10%)

3. How does meter select meter band? (10%)

## Part 3. Modify your code. (40%)

Preparation:

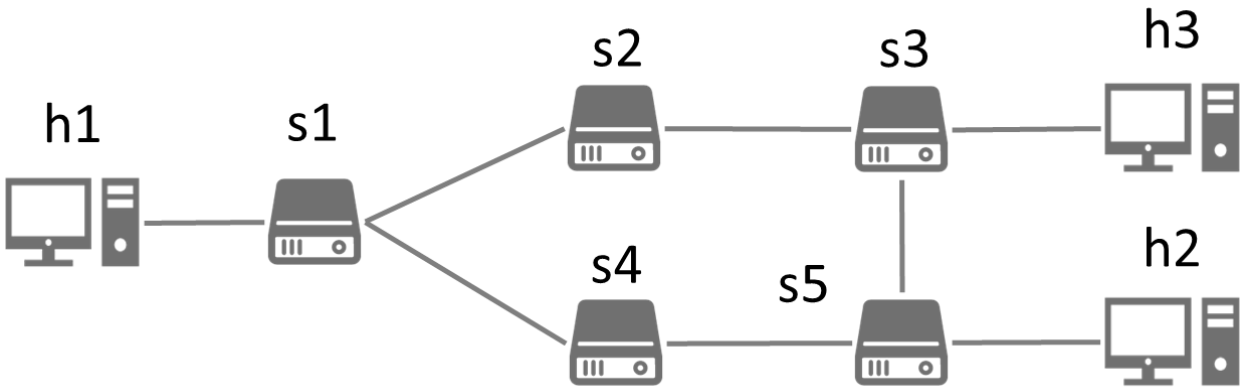
(1) Make a copy of your application

(2) Change the artifact ID in pox.xml to “no-packet-in”

Modification:

1. Add a host h3 (10%)
   - Mac: 00:00:00:00:00:03
   - IP: 10.6.1.3/24
   - Gateway: 10.6.1.254

2. Add a link between h3 and s3
3. Modify “hostconfig.json” to provide **ConnectPoint**, **MacAddress**, and **IpAddress** of all hosts
4. Modify your application to provide intents between h3 and h1, h3 and h2 without packet-in any IPv4 packet. (30%)
   Hint: You can create an intent as soon as you acquire 2 connect points.




## Appendix: Useful commands

Check intents: (reference)

```
(bash)$ onos localhost intents [options]
```

Remove specified intents: (reference)

```
(bash)$ onos localhost remove-intent [options] <app-id> <intent-id>
```