

```
ubuntu@ip-172-31-84-237:~$ simple_switch_CLI --thrift-port 9090
Obtaining JSON from switch...
Done
Control utility for runtime P4 table manipulation
RuntimeCmd: table_add l2_forwarding forward 00:00:00:00:00:01 => 1
Adding entry to exact match table l2_forwarding
match key:      EXACT-00:00:00:00:00:01
action:         forward
runtime data:   00:01
Entry has been added with handle 0
RuntimeCmd: table_add l2_forwarding forward 00:00:00:00:00:02 => 2
Adding entry to exact match table l2_forwarding
match key:      EXACT-00:00:00:00:00:02
action:         forward
runtime data:   00:02
Entry has been added with handle 1
RuntimeCmd: table_add tbl_select_level set_bucket 10.1.2.3/32 => 1
Adding entry to lpm match table tbl_select_level
match key:      LPM-0a:01:02:03/32
action:         set_bucket
runtime data:   01
Entry has been added with handle 0
RuntimeCmd: table_add tbl_select_level set_bucket 10.1.2.4/32 => 2
Adding entry to lpm match table tbl_select_level
match key:      LPM-0a:01:02:04/32
action:         set_bucket
runtime data:   02
Entry has been added with handle 1
RuntimeCmd: register_read ip_count_register 0
ip_count_register[0]= 16
RuntimeCmd: register_read ip_count_register 1
ip_count_register[1]= 0
RuntimeCmd: register_read ip_count_register 2
ip_count_register[2]= 0
RuntimeCmd: register_read ip_count_register 3
ip_count_register[3]= 5
RuntimeCmd: register_read ip_count_register 255
ip_count_register[255]= 0
```

```
aws Services Search [Option+S]
ubuntu@ip-172-31-84-237:~$ rm -rf o*
ubuntu@ip-172-31-84-237:~$ nano o3.p4
ubuntu@ip-172-31-84-237:~$ p4c --target bmv2 --arch v1model --std p4-16 o3.p4
ubuntu@ip-172-31-84-237:~$ sudo python3 topology.py
*** Creating network
*** Adding hosts:
h1 h2
*** Adding switches:
s1
*** Adding links:
(h1, s1) (h2, s1)
*** Configuring hosts
h1 h2
*** Starting controller

*** Starting 1 switches
s1
*** Starting CLI:
mininet> h1 arp -s 10.1.2.4 00:00:00:00:00:02
mininet> h2 arp -s 10.1.2.3 00:00:00:00:00:01
mininet> h1 ping h2
PING 10.1.2.4 (10.1.2.4) 56(84) bytes of data.
64 bytes from 10.1.2.4: icmp_seq=1 ttl=64 time=1.93 ms
64 bytes from 10.1.2.4: icmp_seq=2 ttl=64 time=0.755 ms
64 bytes from 10.1.2.4: icmp_seq=3 ttl=64 time=0.697 ms
64 bytes from 10.1.2.4: icmp_seq=4 ttl=64 time=0.754 ms
64 bytes from 10.1.2.4: icmp_seq=5 ttl=64 time=0.763 ms
^C
--- 10.1.2.4 ping statistics ---
```