

@ bmv2 : s1;

Snippet join()

```
persistent i_id : bit<1>[100];
persistent c_id : bit<1>[100];
persistent i_t : bit<32>[100];
persistent c_t : bit<32>[100];
transient z: bit<1>;
if(udp.srcPort == 11111)
    i_id[p.ad_id] = 1;
    i_t[p.ad_id] = p.i_t;
    z = c_id[p.ad_id] == 1;
    p.c_t = z ? c_t[p.ad_id] : 0;
if(udp.srcPort == 22222)
    c_id[p.ad_id] = 1;
    c_t[p.ad_id] = p.c_t;
    z = i_id[p.ad_id] == 1;
    p.i_t = z ? i_t[p.ad_id] : 0;
```

Packet p: udp(srcPort :
11111, 22222)
ad_id : bit<32>;
i_t : bit<32>;
c_t : bit<32>;

@ bmv2 : s2;

Snippet filter()

```
transient c_null : bit<1>;
transient i_null : bit<1>;
c_null = p.c_t == 0;
i_null = p.i_t == 0;
if(c_null or i_null)
    drop();
if(p.ad_id != 7)
    drop();
```

(4, 6, 0)
(3, 1, 0)
(7, 2, 0)

h1

(9, 0, 3)
(3, 0, 4)
(7, 0, 5)

h2

s1

INNER JOIN
(3, 1, 4)
(7, 2, 5)

s2

FILTER
(7, 2, 5)

h3

(7, 2, 5)

