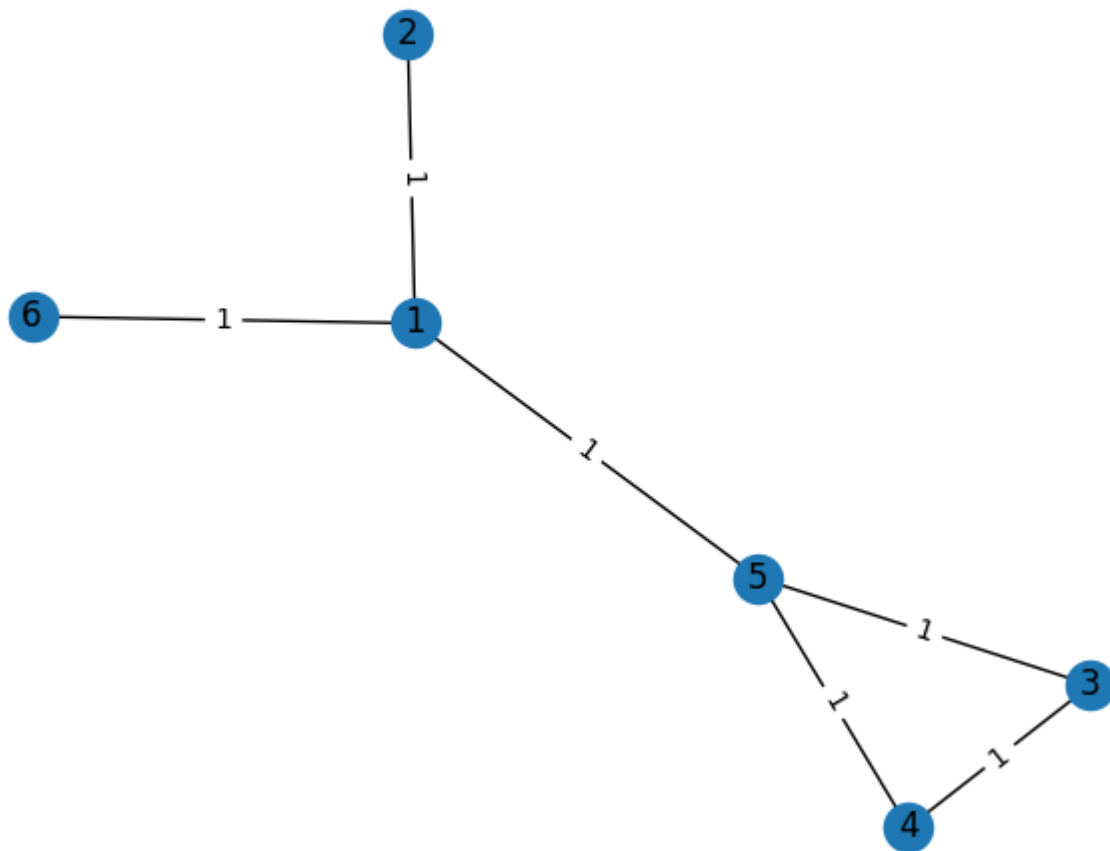# Routing Exercise (seed 3)

Consider the network in the figure and assume that:

- The adoupted routing is DVPR
- The order of the generation of messages follows the numeric order of routers
- The order of the arrival of messages follows the numeric order of routers

Write down the list of generated messages, and the final routing table. You can omit messages that are received but do not alter the routing table of the receing router.

Message sequence

```
1 -> 2 1:0
1 -> 5 1:0
1 -> 6 1:0
2 -> 1 1:10000; 2:0
3 -> 4 3:0
3 -> 5 3:0
4 -> 3 3:10000; 4:0
4 -> 5 3:1; 4:0
5 -> 1 1:10000; 3:1; 4:1; 5:0
5 -> 3 1:1; 3:10000; 4:1; 5:0
5 -> 4 1:1; 3:1; 4:10000; 5:0
6 -> 1 1:10000; 6:0
1 -> 2 1:0; 2:10000; 3:2; 4:2; 5:1; 6:1
1 -> 5 1:0; 2:1; 3:10000; 4:10000; 5:10000; 6:1
1 -> 6 1:0; 2:1; 3:2; 4:2; 5:1; 6:10000
2 -> 1 1:10000; 2:0; 3:10000; 4:10000; 5:10000; 6:10000
3 -> 4 1:2; 3:0; 4:10000; 5:1
3 -> 5 1:10000; 3:0; 4:1; 5:10000
4 -> 3 1:2; 3:10000; 4:0; 5:1
4 -> 5 1:10000; 3:1; 4:0; 5:10000
5 -> 1 1:10000; 2:10000; 3:1; 4:1; 5:0; 6:10000
5 -> 3 1:1; 2:2; 3:10000; 4:1; 5:0; 6:2
5 -> 4 1:1; 2:2; 3:1; 4:10000; 5:0; 6:2
```

Final Routing Table

```
1
    1: nh=1, cost=0
    2: nh=2, cost=1
    5: nh=5, cost=1
    3: nh=5, cost=2
    4: nh=5, cost=2
    6: nh=6, cost=1
2
    2: nh=2, cost=0
    1: nh=1, cost=1
    5: nh=1, cost=2
    3: nh=1, cost=3
    4: nh=1, cost=3
    6: nh=1, cost=2
3
    3: nh=3, cost=0
    4: nh=4, cost=1
    5: nh=5, cost=1
    1: nh=5, cost=2
    2: nh=5, cost=3
    6: nh=5, cost=3
4
    4: nh=4, cost=0
```

```
        3: nh=3, cost=1
        5: nh=5, cost=1
        1: nh=5, cost=2
        2: nh=5, cost=3
        6: nh=5, cost=3
5
        5: nh=5, cost=0
        1: nh=1, cost=1
        3: nh=3, cost=1
        4: nh=4, cost=1
        2: nh=1, cost=2
        6: nh=1, cost=2
6
        6: nh=6, cost=0
        1: nh=1, cost=1
        2: nh=1, cost=2
        5: nh=1, cost=2
        3: nh=1, cost=3
        4: nh=1, cost=3
```