## Report on Assignment 3 of Networking Sessional

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I have run my program several times and have taken note of average number of hops and drop rate for LAMBDA = 0.01, 0.05, 0.10, 0.25, 0.50 and 0.80. These notes are given below in a table

| LAMBDA | average number of hops | drop rate |
|--------|------------------------|-----------|
| 0.01   | 1                      | 0         |
| 0.05   | .75                    | .25       |
| .10    | .57                    | .43       |
| .25    | .53                    | .47       |
| .50    | .54                    | .46       |
| .80    | .07                    | .93       |

Table 1: Table for DVR with split horizon and forced update

But when I have run my simulation without split horizon and forced update by applying simpleDVR with LAMBDA = .10 .The drop rate has increased and it becomes .78 and the average hop count also decreases to .22. The good news(The news of routers being on) spreads at a speed of diameter of the topology. But when a router goes down it takes infinity time to reach to all other routers. It is called count to infinity problem. This problem happens because a perticular router does not know whether it is the next hop node in the neighbouring paths. So to decrase the drop rate Split horizon and forced update is applied.