P3

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| step | N’ | D(z),p(z) | D(y),p(y) | D(w),p(w) | D(v),p(v) | D(t),p(t) | D(u),p(u) |
| 0 | x | 8,x | 6,x | 6,x | 3,x | ∞ | ∞ |
| 1 | x,v | 8,x | 6,x | 6,x | ~ | 7,v | 6,v |
| 2 | x,v,y | 8,x | ~ | 6,x | ~ | 7,v | 6,v |
| 3 | x,v,y,w | 8,x | ~ | ~ | ~ | 7,v | 6,v |
| 4 | x,v,y,w,u | 8,x | ~ | ~ | ~ | 7,v | ~ |
| 5 | X,v,y,w,u,t | 8,x | ~ | ~ | ~ | ~ | ~ |
| 6 | X,v,y,w,u,t,z | ~ | ~ | ~ | ~ | ~ | ~ |

P7.

1. [ Dx(x), Dx(w), Dx(y),Dx(u)] = [0, 2, 4, 7]
2. Change x-w from 2 to 10.

First, the Distance vector in node X would be changed to [0,7,5,11]. Then node x will inform this distance vector to node w and y.

1. Change x-y from 5 to 10.

Because this change will not update the distance vector in node X. X will not inform w, y this change.