

**Answer 6:**

Step	N	D(s), p(s)	D(t), p(t)	D(v), p(v)	D(w), p(w)	D(x), p(x)	D(y), p(y)	D(z), p(z)
0	u	$\infty$	$\infty$	3,u	2,u	$\infty$	$\infty$	$\infty$
1	uw	6,w	$\infty$	3,u		3,w	$\infty$	$\infty$
2	uwv	6,w	$\infty$			3,w	5,v	$\infty$
3	uwvx	6,w	8,x				5,v	6,y
4	uwvxy	6,w	8,x					6,y
5	uwvxys		8,x					6,y
6	uwvxysz		8,x					
7	uwvxyszt							

The highlighted part is shortest path at each step that is considered and then the node is picked.

Final shortest path to each vertex

