

$s=1, t=5$	x	y	queue	visited	dist-dictionary	next-dictionary																				
initialization			<div><div>5</div></div>	{5}	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr></table>	1	2	3	4	5					0	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>	1	2	3	4	5					
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$s=y=1 \Rightarrow \text{stop}$

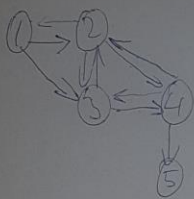
The path is built from next

1	2	3	4	5
4	3	5	5	

 beginning with $s=1$

$s=1 \Rightarrow \text{next}[1]=4; \text{next}[4]=5=t$

path = [1, 4, 5], length = dist[5] = dist[1] = 2



$\Delta=1, t=4$	x	y	queue	visited	dist-dictionary	next-dictionary
initialization			4	{4}	1 2 3 4 5 [][][][] 0	1 2 3 4 5 [][][][]
iteration 1	4		3	{4, 3}	1 2 3 4 5 [][] 1 [] 0	1 2 3 4 5 [][] 4 []
iteration 1.1		3	2	{4, 3, 2}	1 2 3 4 5 [][] 1 [] 0	1 2 3 4 5 [][] 4 []
iteration 1.2		2	1	{4, 3, 2, 1}	1 2 3 4 5 [][] 1 [] 0	1 2 3 4 5 [][] 4 []
iteration 2	3		2	{4, 3, 2, 1}	1 2 3 4 5 [][] 1 [] 0	1 2 3 4 5 [][] 4 []
iteration 2.1		1	2	{4, 3, 2, 1}	1 2 3 4 5 [][] 1 [] 0	1 2 3 4 5 [][] 4 []

$y = \Delta = 1 \Rightarrow$ stops

The path is built from next

1	2	3	4	5
3	4	4		

 beginning with

$\Delta=1$

$\Delta=1 \Rightarrow \text{next}(1)=3, \text{next}(3)=4=t$

path = [1, 3, 4], length = dist(5) = dist(1) = 2