

Lab2: Lowest length path between s and t by using breadth-first forward search

s=1,t=3	x	y	queue	visited	dist - dictionary	prev - dictionary
init			< 1 <	{1}	1 2 3 4 5 0	1 2 3 4 5
it 1 it 1.1 it 1.2	1	2 4	< 2 < < 4 <	{1,2} {1,2,4}	1 2 3 4 5 0 1 1	1 2 3 4 5 1 1
It 2 it 2.1	2	3	< 3 <	{1,2,4,3}	1 2 3 4 5 0 1 2 1	1 2 3 4 5 1 2 1

$y = 3 = t \Rightarrow$ stop!

The path is built from prev, being { 1 > 2 > 3 }, length = 2.

Minimum path and lengths for given graphs:

- Graph 1k: 1 > 100: 1 > 5 > 487 > 175 > 699 > 624 > 100, length = 6
100 > 1: 100 > 416 > 354 > 865 > 109 > 1, length = 5
- Graph 10k: 1 > 100: 1 > 3300 > 2607 > 523 > 6311 > 5359 > 9794 > 5173 > 100, length = 8
100 > 1: 100 > 2398 > 3054 > 5232 > 8217 > 2478 > 7151 > 1, length = 7

