/Library/Java/JavaVirtualMachines/jdk-13.0.1.jdk/Contents/Home/bin/java "-javaagent:/Applications/IntelliJ IDEA.app/Contents/lib/idea_rt.jar=54794:/Applications/IntelliJ IDEA.app/Contents/bin" -Dfile.encoding=UTF-8 -classpath "/Users/lanshunfang/Documents/NEU-Classes-Courses/Program Structure - Algorithms/alg-hw/out/production/alg-hw" org.neu.alg.hw.hw8.GraphTest

Java version used for this program is 13.0.1

GraphTest.java starts

You can see dot file at /Users/lanshunfang/Downloads/graph-output/50.dot

```
File 50.txt
```

Num Vertices = 6 Num Edges = 8 Work done = 6 BFS order = 0 5 1 2 3 4 BFS path = 0 0 0 0 5 2 0 0->5 0->1 0->2

0->5->3 0->2->4

You can see dot file at /Users/lanshunfang/Downloads/graph-output/1.dot

File 1.txt

Num Vertices = 5 Num Edges = 4 Work done = 5 BFS order = 1 2 3 4 5 BFS path = 1 1 1 3 3 1 1->2 1->3 1->3->4 1->3->5

You can see dot file at /Users/lanshunfang/Downloads/graph-output/2.dot

File 2.txt

Num Vertices = 5 Num Edges = 2 Work done = 5

```
BFS order
             = 12345
BFS path
             = 1 1 1 2 4
1
1->2
1->3
1->2->4
1->2->4->5
You can see dot file at /Users/lanshunfang/Downloads/graph-output/3.dot
File 3.txt
Num Vertices = 5
Num Edges
            = 3
Work done
             = 5
BFS order
            = 0 1 2 3 4
BFS path
             = 0 0 0 1 3
0
0->1
0->2
0->1->3
0->1->3->4
You can see dot file at /Users/lanshunfang/Downloads/graph-output/4.dot
File 4.txt
Num Vertices = 3
Num Edges
           = 1
Work done
              = 3
BFS order
             = A B C
BFS path
             = A A A
Α
A->B
A->C
-----
You can see dot file at /Users/lanshunfang/Downloads/graph-output/5.dot
File 5.txt
Num Vertices = 8
Num Edges
            = 10
Work done
              = 8
BFS order
             =01324756
```

```
BFS path
             =00013344
0
0->1
0->3
0->1->2
0->3->4
0->3->7
0->3->4->5
0->3->4->6
You can see dot file at /Users/lanshunfang/Downloads/graph-output/6.dot
File 6.txt
Num Vertices = 5
Num Edges = 4
Work done
             = 5
BFS order
            = 1 2 5 9 10
BFS path
             = 1 1 1 5 5
1
1->2
1->5
1->5->9
1->5->10
You can see dot file at /Users/lanshunfang/Downloads/graph-output/7.dot
File 7.txt
Num Vertices = 7
Num Edges = 6
Work done
             = 7
BFS order
            = 0 2 3 1 5 4 6
BFS path
             = 0 0 0 0 2 2 1
0
0->2
0->3
0->1
0->2->5
0->2->4
0->1->6
-----
GraphTest.java Ends
```

goggle: grapviz online

Process finished with exit code 0