https://github.com/Fonz-Hamilton/CSE-464-2024-Cahamil1

Course project part 1 for CSE 464

Features:

- parseGraph – parses DOT file https://github.com/Fonz-Hamilton/CSE-464-2024-Cahamil1/commit/c59eeeacf8e0b01d00113c568aba2629dd9907a6

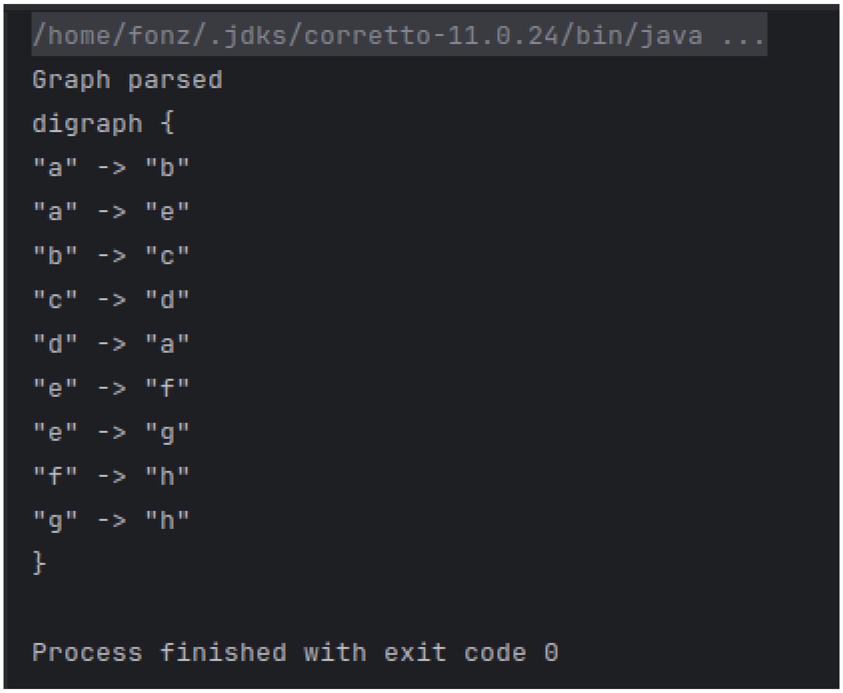
- addNode and addNodes – allows you to add a node to the graph https://github.com/Fonz-Hamilton/CSE-464-2024-Cahamil1/commit/1f63bc43a9078c84aff55d94481f126420c750b7

- addEdge – allows you to add an edge between nodes https://github.com/Fonz-Hamilton/CSE-464-2024-Cahamil1/commit/97e3ea4e13eebf2b652f8008196e3d73bfb7825a

- outputDOTGraph – allows you to output a file of the graph in DOT format
- outputGraphics – allows you to output a png file of the graph https://github.com/Fonz-Hamilton/CSE-464-2024-Cahamil1/commit/844ccb1de8b97a2581674955bc59b1221942e60d

parseGraph -

```
DOTGraph dotGraph = new DOTGraph();

dotGraph.parseGraph("input.dot");
System.out.println(dotGraph.toString());
```



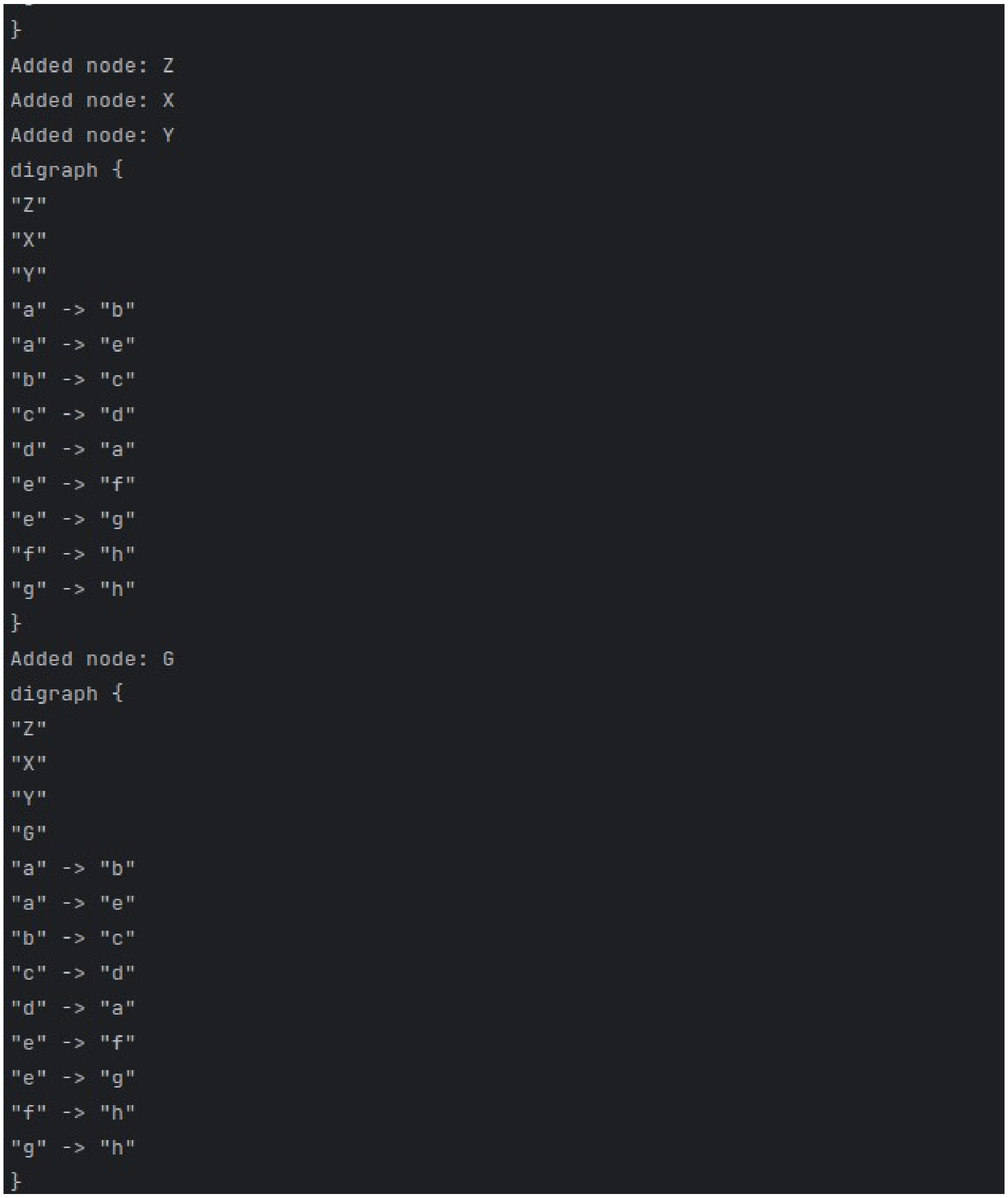
```
/home/fonz/.jdks/corretto-11.0.24/bin/java ...
Graph parsed
digraph {
"a" -> "b"
"a" -> "e"
"b" -> "c"
"c" -> "d"
"d" -> "a"
"e" -> "f"
"e" -> "g"
"f" -> "h"
"g" -> "h"
}

Process finished with exit code 0
```

addNodes -

```
    String[] nodesToAdd = {"Z", "X", "Y"};
    dotGraph.addNodes(nodesToAdd);
    System.out.println(dotGraph.toString());
```

addNode -

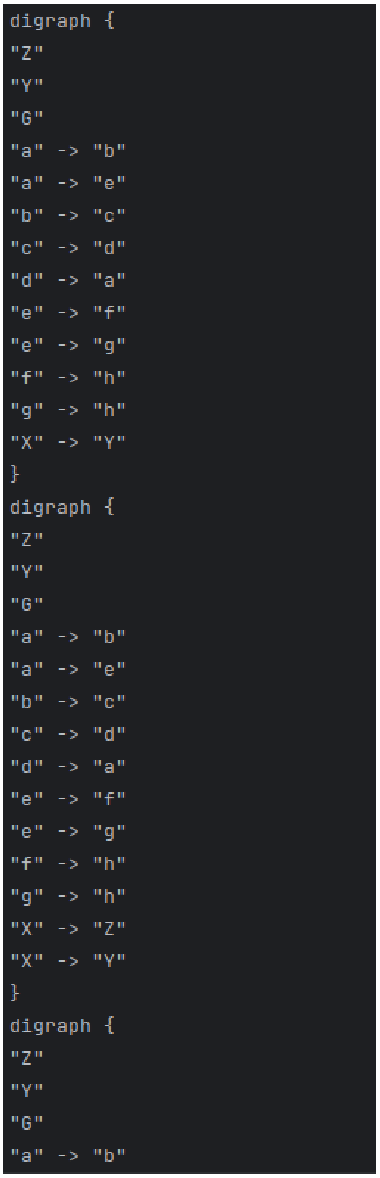
```
    String addedNode = "G";
    dotGraph.addNode(addedNode);
    System.out.println(dotGraph.toString());
```



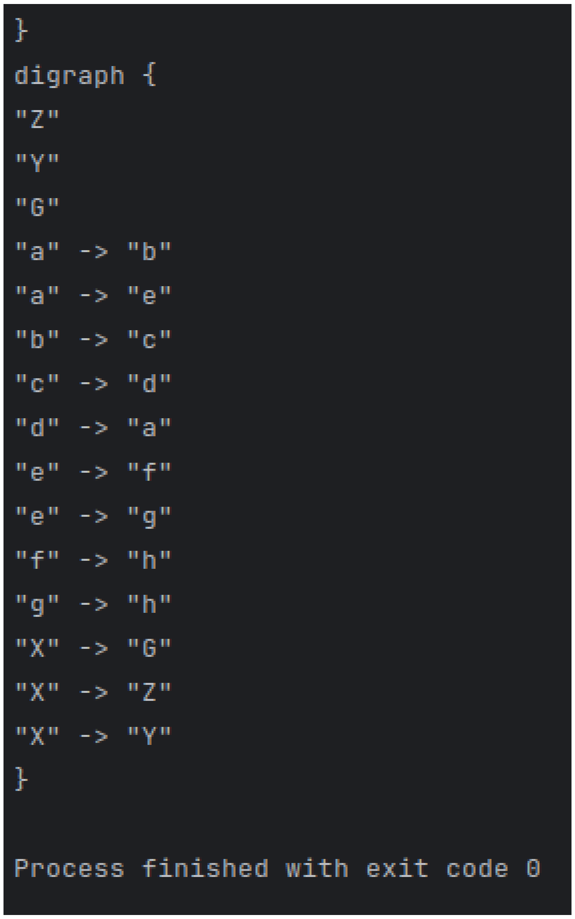
```
}
Added node: Z
Added node: X
Added node: Y
digraph {
"Z"
"X"
"Y"
"a" -> "b"
"a" -> "e"
"b" -> "c"
"c" -> "d"
"d" -> "a"
"e" -> "f"
"e" -> "g"
"f" -> "h"
"g" -> "h"
}
Added node: G
digraph {
"Z"
"X"
"Y"
"G"
"a" -> "b"
"a" -> "e"
"b" -> "c"
"c" -> "d"
"d" -> "a"
"e" -> "f"
"e" -> "g"
"f" -> "h"
"g" -> "h"
}
```

addEdge -

```
dotGraph.addEdge("X","Y");
System.out.println(dotGraph.toString());
dotGraph.addEdge("X","Z");
System.out.println(dotGraph.toString());
dotGraph.addEdge("X","G");
System.out.println(dotGraph.toString());
```



```
digraph {
"Z"
"Y"
"G"
"a" -> "b"
"a" -> "e"
"b" -> "c"
"c" -> "d"
"d" -> "a"
"e" -> "f"
"e" -> "g"
"f" -> "h"
"g" -> "h"
"X" -> "Y"
}
digraph {
"Z"
"Y"
"G"
"a" -> "b"
"a" -> "e"
"b" -> "c"
"c" -> "d"
"d" -> "a"
"e" -> "f"
"e" -> "g"
"f" -> "h"
"g" -> "h"
"X" -> "Z"
"X" -> "Y"
}
digraph {
"Z"
"Y"
"G"
"a" -> "b"
```



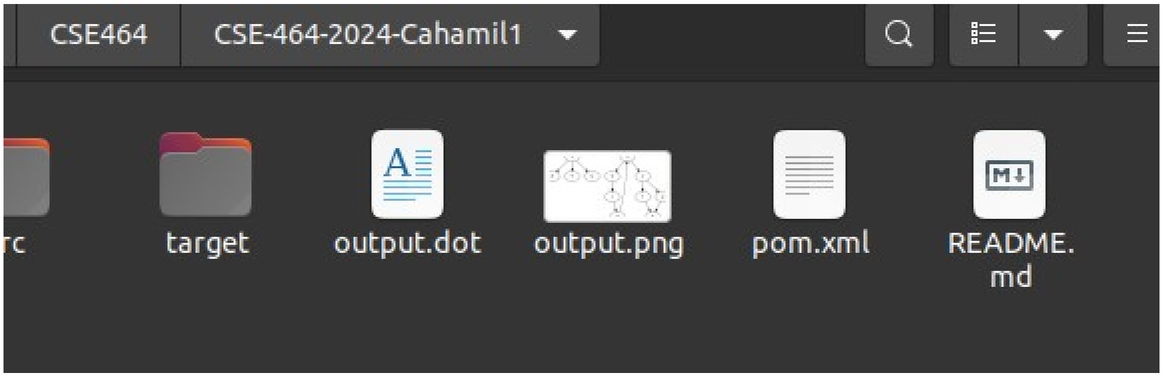
```
}
digraph {
"Z"
"Y"
"G"
"a" -> "b"
"a" -> "e"
"b" -> "c"
"c" -> "d"
"d" -> "a"
"e" -> "f"
"e" -> "g"
"f" -> "h"
"g" -> "h"
"X" -> "G"
"X" -> "Z"
"X" -> "Y"
}

Process finished with exit code 0
```

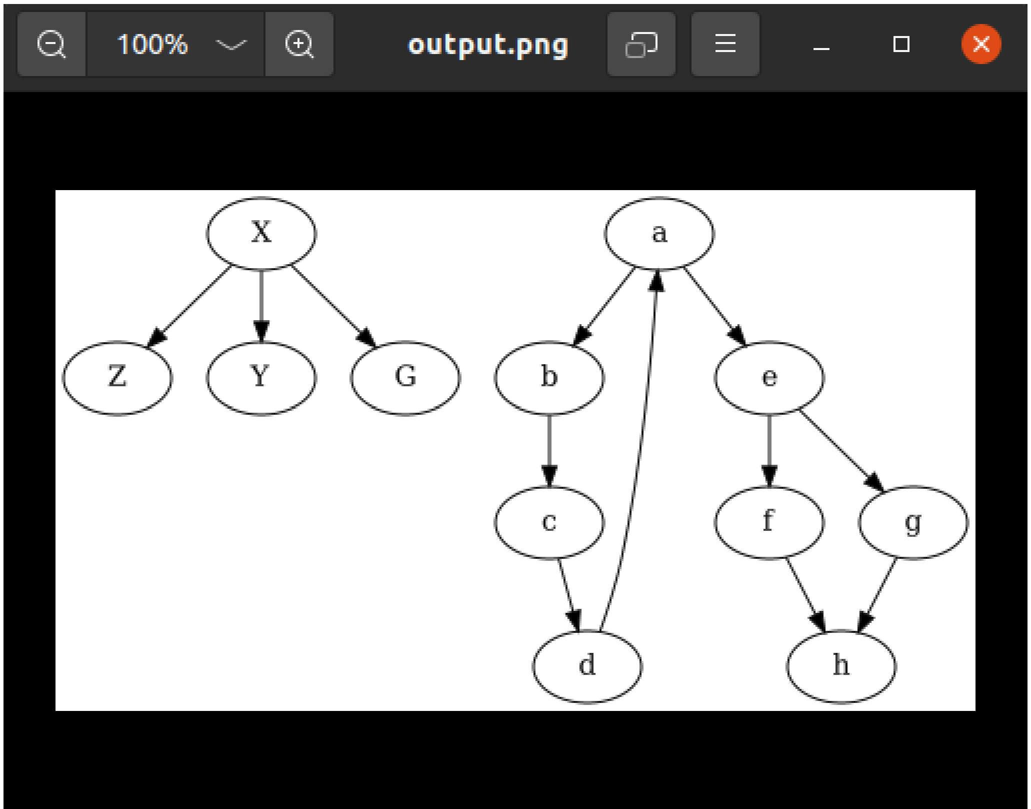
outputDOTGraph -

```
dotGraph.outputDOTGraph("output.dot");
```

outputGraphic -

```
dotGraph.outputGraphics("output","png");
```


CSE464
CSE-464-2024-Cahamil1
rc
target
output.dot
output.png
pom.xml
README.md


100%
output.png
X
Z
Y
G
a
b
e
c
f
g
d
h