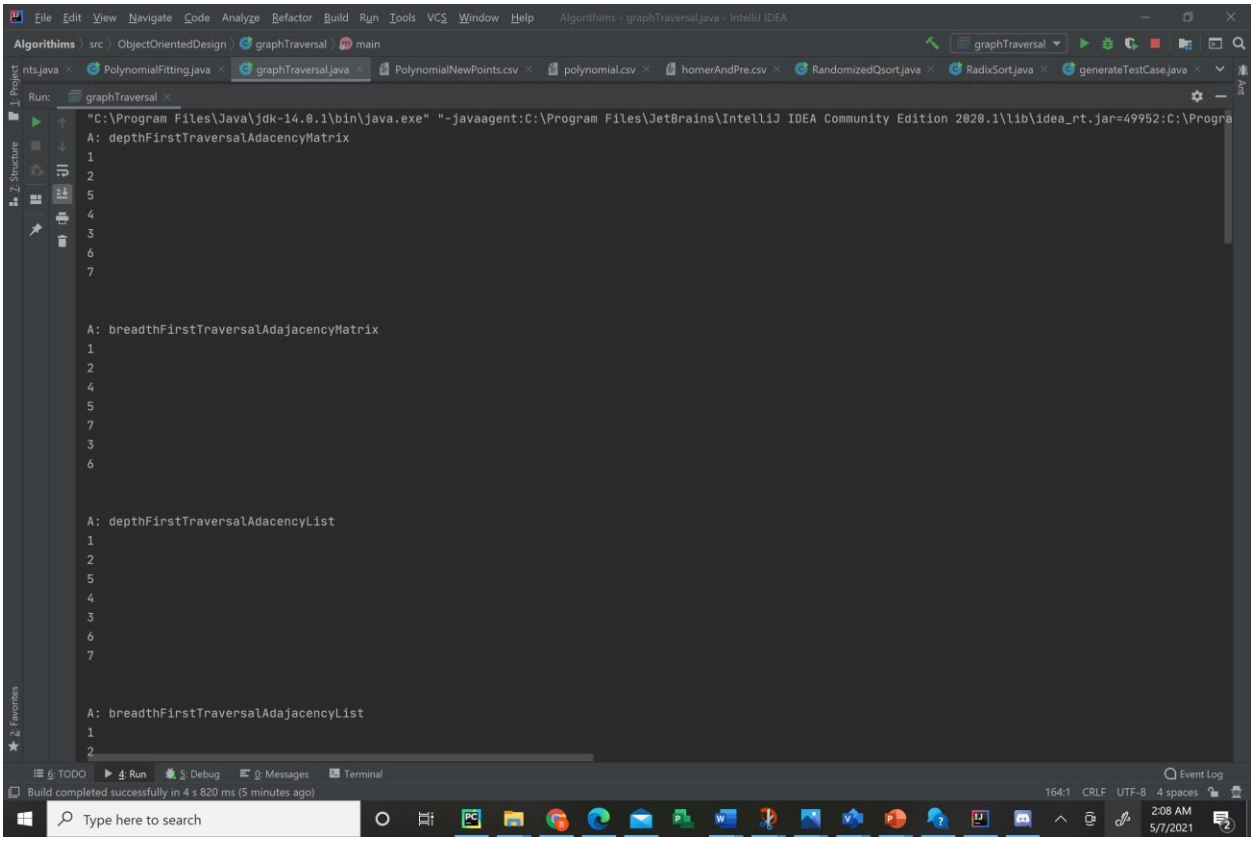
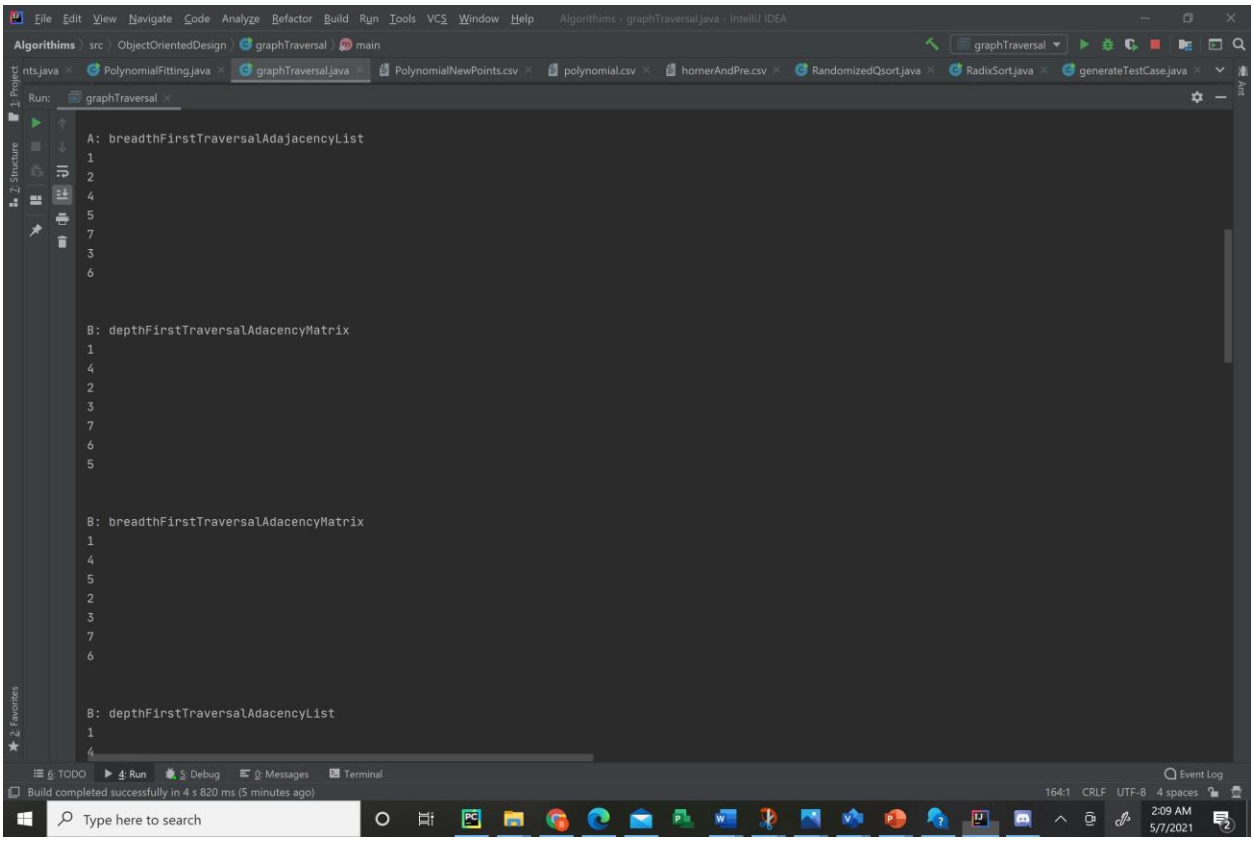
Ben Sottile

Assignment 12

Screenshots:




File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Algorithims - graphTraversal.java - IntelliJ IDEA
Algorithims src ObjectOrientedDesign graphTraversal main
graphTraversal
nts.java PolynomialFitting.java graphTraversal.java PolynomialNewPoints.csv polynomial.csv homerAndPre.csv RandomizedQsort.java RadixSort.java generateTestCase.java
Run: graphTraversal
A: breadthFirstTraversalAdajacencyList
1
2
4
5
7
3
6
B: depthFirstTraversalAdacencyMatrix
1
4
2
3
7
6
5
B: breadthFirstTraversalAdacencyMatrix
1
4
5
2
3
7
6
B: depthFirstTraversalAdacencyList
1
4
6: TODO 4: Run 5: Debug 0: Messages Terminal
Event Log
Build completed successfully in 4 s 820 ms (5 minutes ago)
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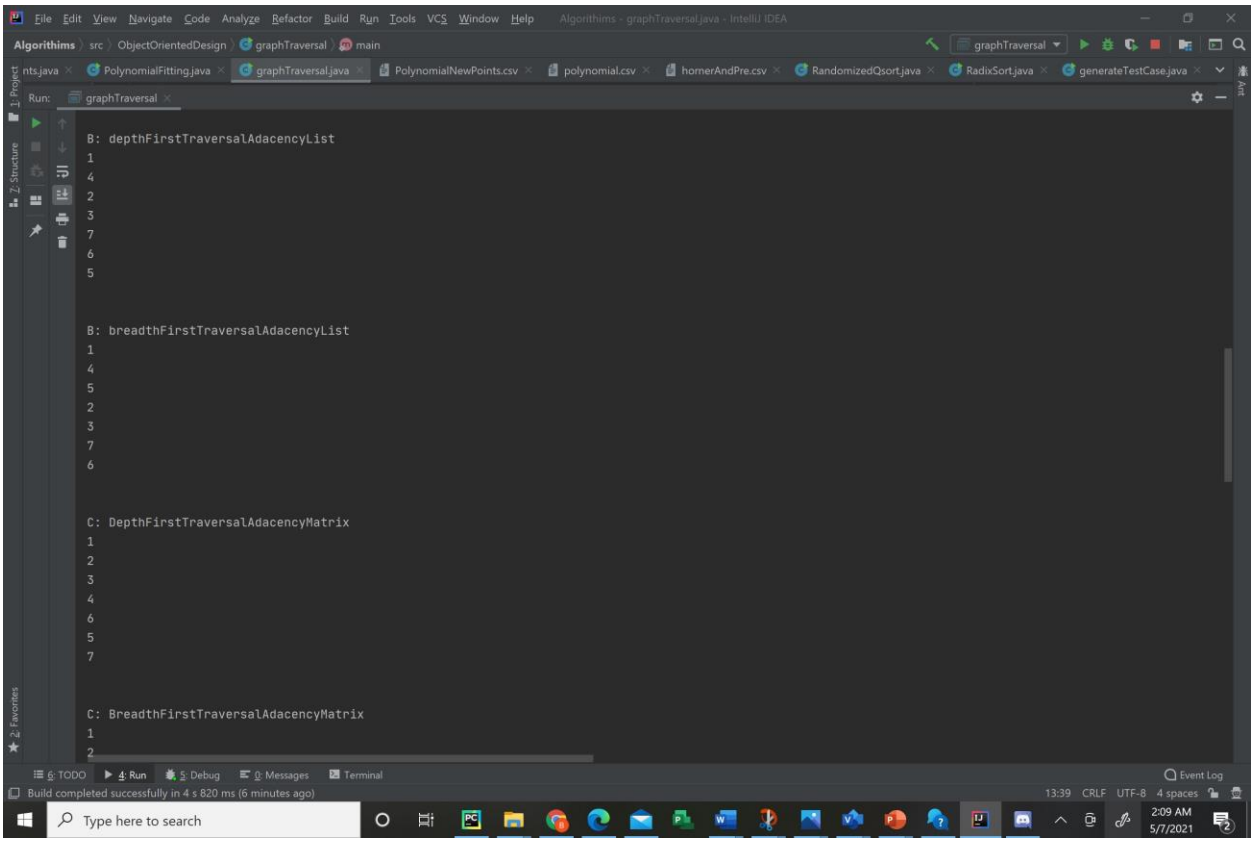
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Algorithims - graphTraversal.java - IntelliJ IDEA
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graphTraversal
nts.java PolynomialFitting.java graphTraversal.java PolynomialNewPoints.csv polynomial.csv homerAndPre.csv RandomizedQsort.java RadixSort.java generateTestCase.java
Run: graphTraversal
B: depthFirstTraversalAdacencyList
1
4
2
3
7
6
5
B: breadthFirstTraversalAdacencyList
1
4
5
2
3
7
6
C: DepthFirstTraversalAdacencyMatrix
1
2
3
4
6
5
7
C: BreadthFirstTraversalAdacencyMatrix
1
2
6: TODO 4: Run 5: Debug 0: Messages Terminal
Event Log
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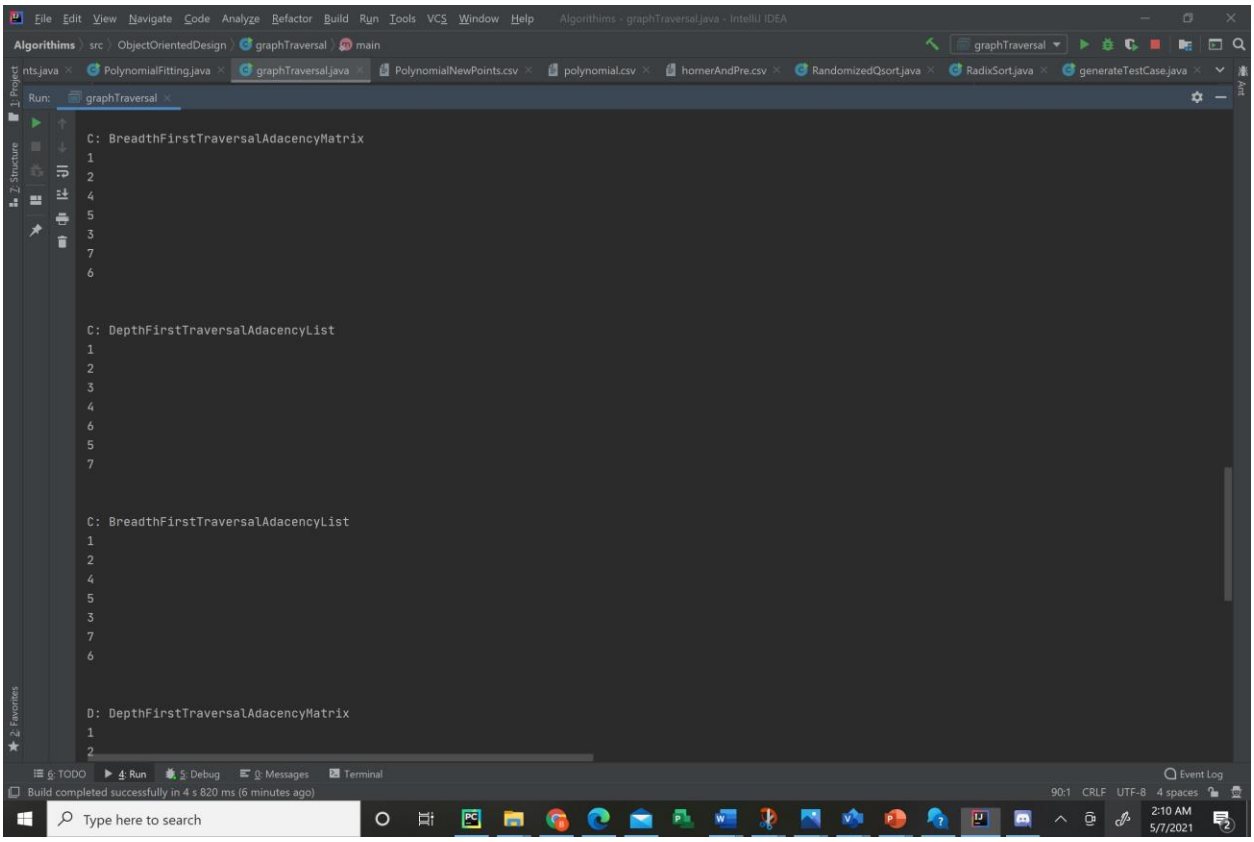
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Algorithims - graphTraversal.java - IntelliJ IDEA
Algorithims src ObjectOrientedDesign graphTraversal main
graphTraversal
nts.java PolynomialFitting.java graphTraversal.java PolynomialNewPoints.csv polynomial.csv homerAndPre.csv RandomizedQsort.java RadixSort.java generateTestCase.java
Run: graphTraversal
C: BreadthFirstTraversalAdacencyMatrix
1
2
4
5
3
7
6
C: DepthFirstTraversalAdacencyList
1
2
3
4
6
5
7
C: BreadthFirstTraversalAdacencyList
1
2
4
5
3
7
6
D: DepthFirstTraversalAdacencyMatrix
1
2
6 TODO 4 Run 5 Debug 0 Messages Terminal
Event Log
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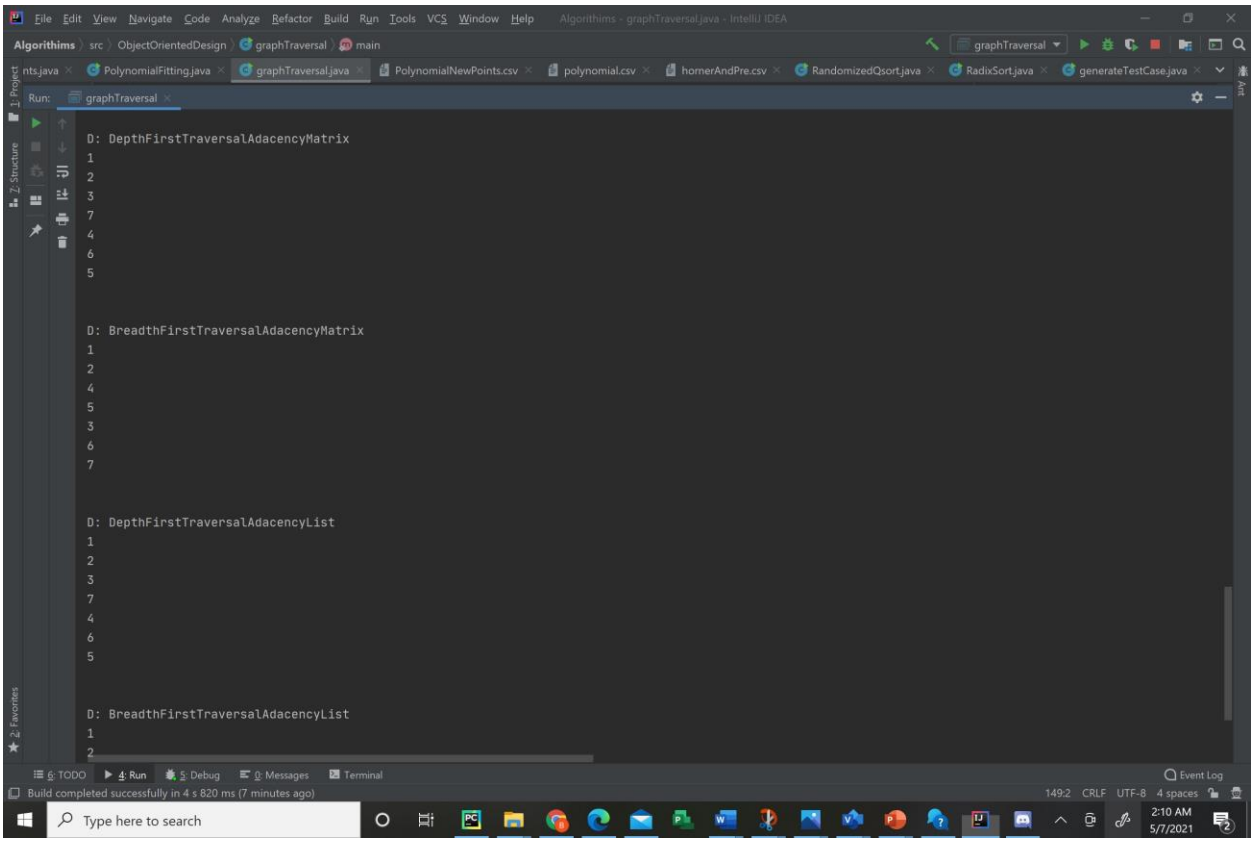
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Algorithims - graphTraversal.java - IntelliJ IDEA
Algorithims src ObjectOrientedDesign graphTraversal main
graphTraversal
nts.java PolynomialFitting.java graphTraversal.java PolynomialNewPoints.csv polynomial.csv homerAndPre.csv RandomizedQsort.java RadixSort.java generateTestCase.java
Run: graphTraversal
D: DepthFirstTraversalAdacencyMatrix
1
2
3
7
4
6
5
D: BreadthFirstTraversalAdacencyMatrix
1
2
4
5
3
6
7
D: DepthFirstTraversalAdacencyList
1
2
3
7
4
6
5
D: BreadthFirstTraversalAdacencyList
1
2
6 TODO 4 Run 5 Debug 0 Messages Terminal
Event Log
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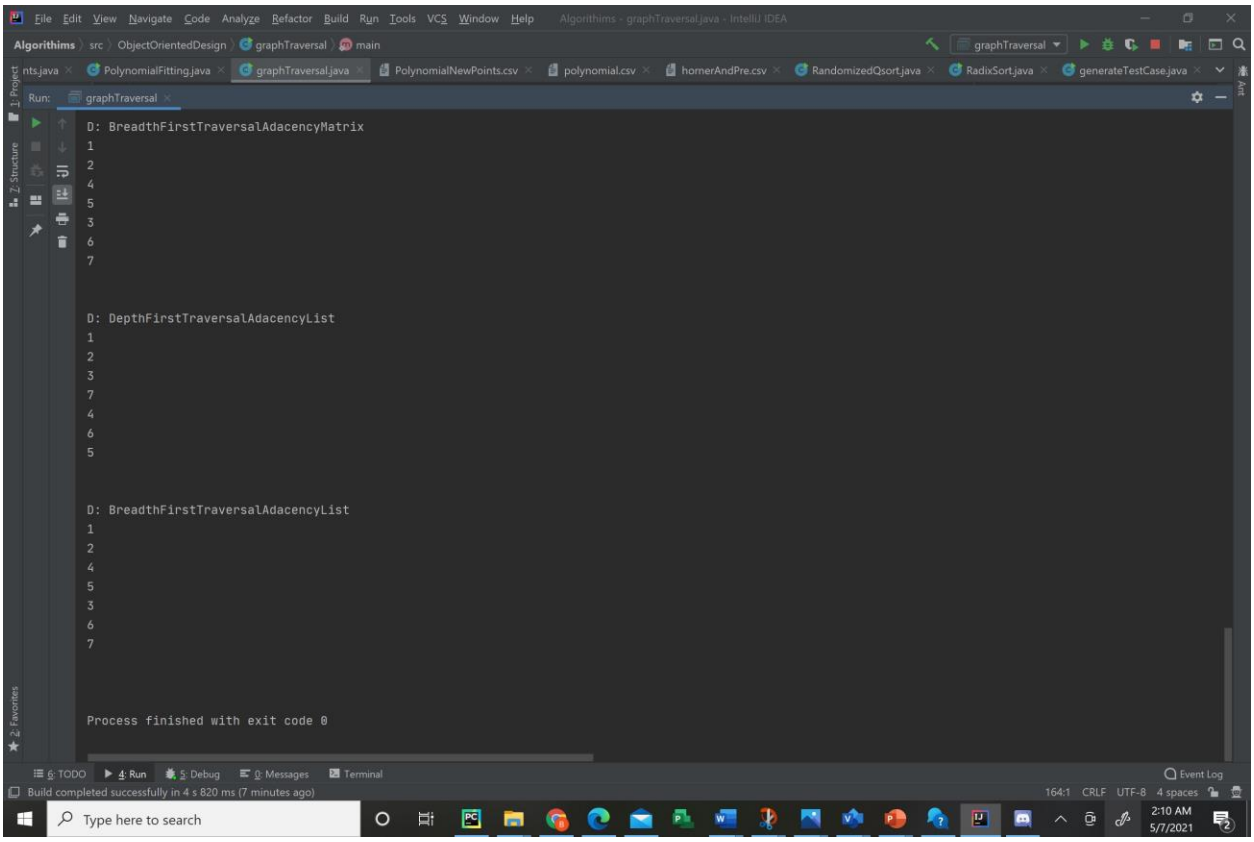
5/7/2021



Reflection Essay

This wasn't a hard assignment by any means. I used adjacency matrixes that Geet posted in the Discord chat(I made sure they were correct of course!) which saved me time. I also made a function to convert them to Adjacency Lists/ lists of linked lists. Armed with the recorded lecture in the background and the psudocode from the book I was able to scribble slightly more elaborate psudocode(that took into account data structures) with which I modeled the traversals. Most of my initial planning was correct and I was able to move through all the traversals with only a slight bit of debugging mostly around using the adjacency lists. I confirmed my answers those posted on the discord chat. After finding they matched I believe this code works as desired.