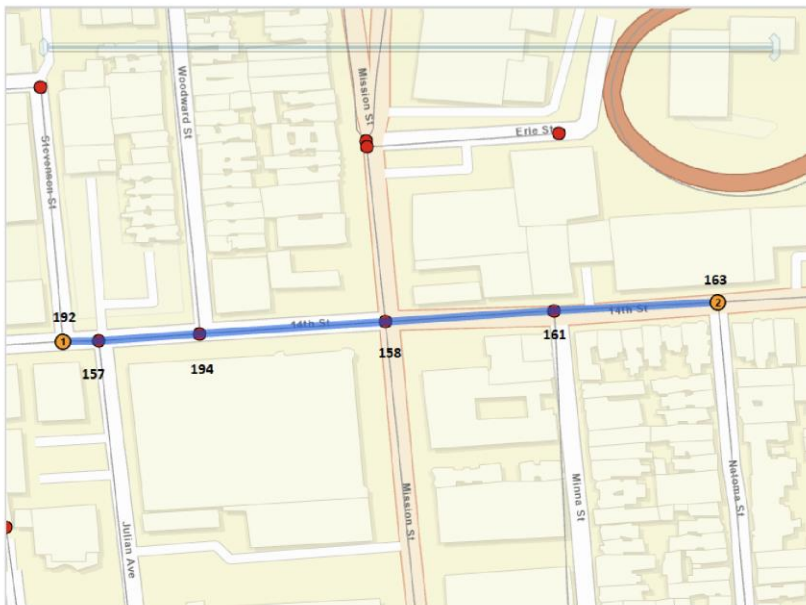


Testcases

Dijkstra's Using 2D Testcase 1:

```
shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argfile com.assignment.Dijkstras2D
Enter The File Name To Read The Graph
4
Enter the source vertex:
192
Enter the destination vertex:
163
Path is: [192, 157, 194, 158, 161, 163]
Shortest distance from 192 to 163 is 819
elapsedTime:5121098042
Memory used: 7301200 bytes
shusritavenugopal@Shusritas-MacBook-Air assignments %
```

Test Case 1 (Project2_Input_File4.csv)



Route 4

Route:

From Node: 192

Go east on 14th St toward Julian Ave

To Node: 163

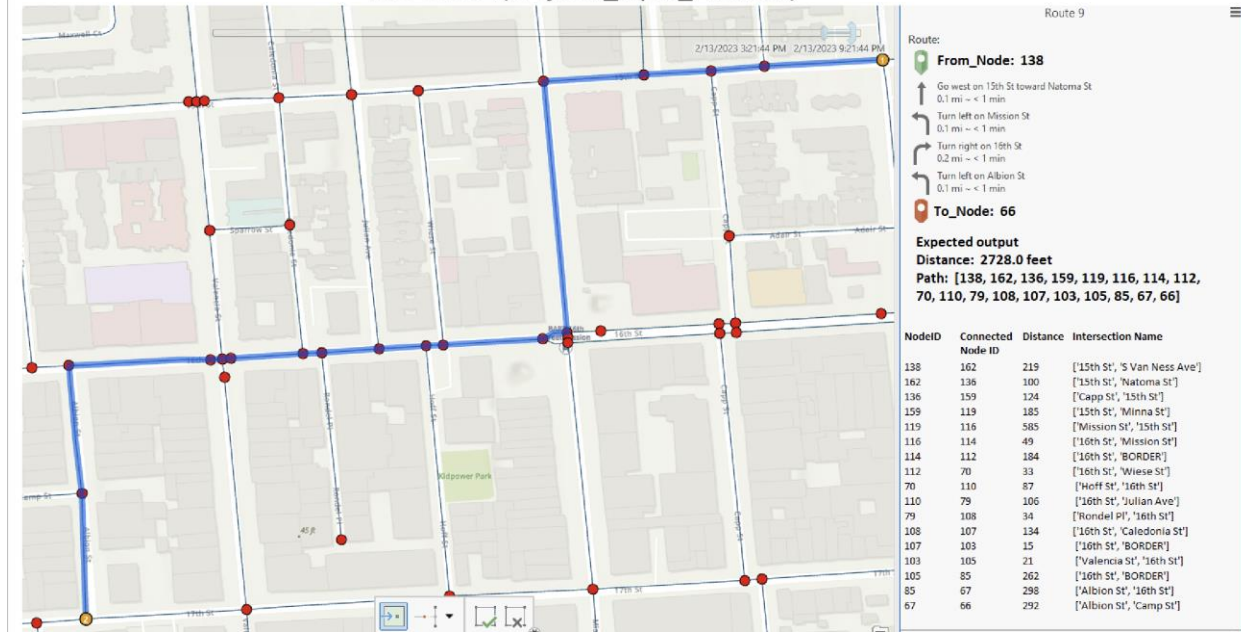
Expected output
Distance: 819 feet
Path: [192, 157, 194, 158, 161, 163]

Node ID	Connected Node ID	Distance	Intersection Name
192	157	44	['14th St', 'Stevenson St']
157	194	126	['Julian Ave', '14th St']
194	158	232	['14th St', 'Woodward St']
158	161	212	['Mission St', '14th St']
161	163	205	['Minna St', '14th St']

Dijkstra's Using 2D Testcase 2:

```
shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argfile com.assignment.Dijkstra2D
Enter The File Name To Read The Graph
4
Enter the source vertex:
138
Enter the destination vertex:
66
Path is: [138, 162, 136, 159, 119, 116, 114, 112, 70, 110, 79, 108, 107, 103, 105, 85, 67, 66]
Shortest distance from 138 to 66 is 2728
elapsedTime:10549162958
Memory used: 7300240 bytes
shusritavenugopal@Shusritas-MacBook-Air assignments %
```

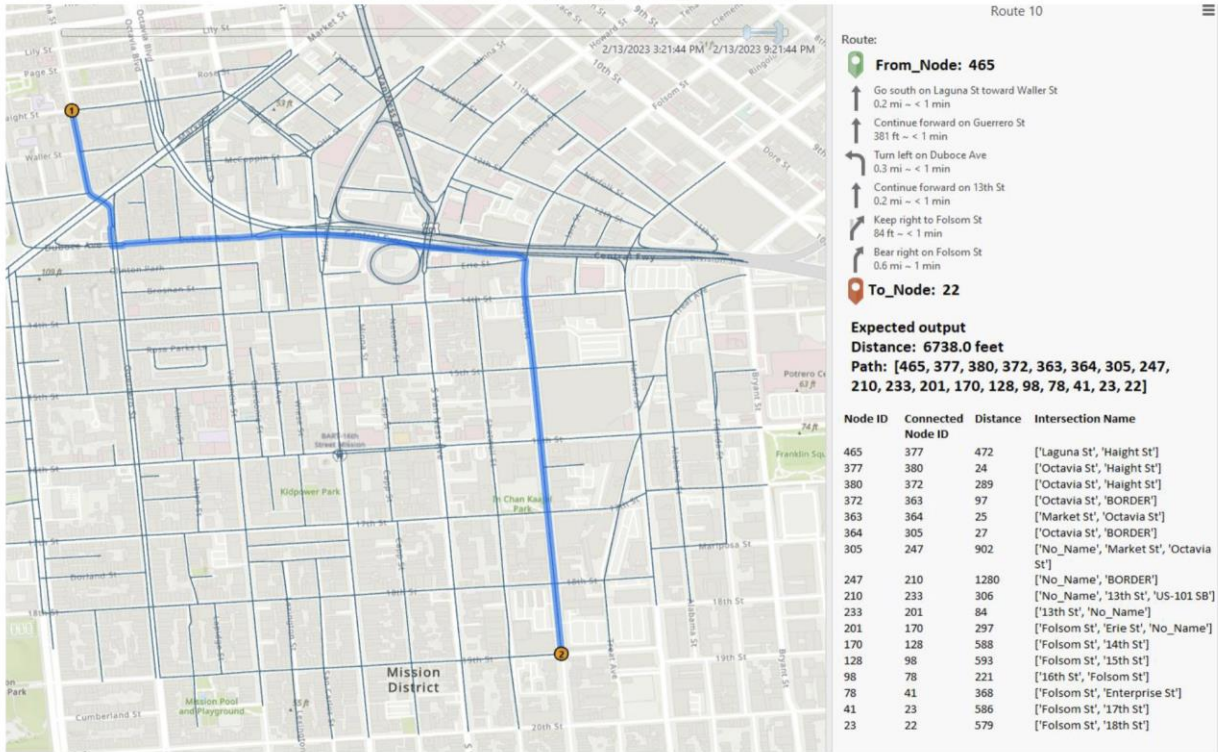
Test Case 2 (Project2_Input_File4.csv)



Dijkstra's Using 2D Testcase 3:

```
shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argfile com.assignment.Dijkstra2D
Enter The File Name To Read The Graph
4
Enter the source vertex:
465
Enter the destination vertex:
22
Path is: [465, 377, 380, 372, 363, 364, 305, 247, 210, 233, 201, 170, 128, 98, 78, 41, 23, 22]
Shortest distance from 465 to 22 is 6738
elapsedTime:11929688542
Memory used: 7300208 bytes
shusritavenugopal@Shusritas-MacBook-Air assignments %
```

Test Case 3 (Project2_Input_File4.csv)



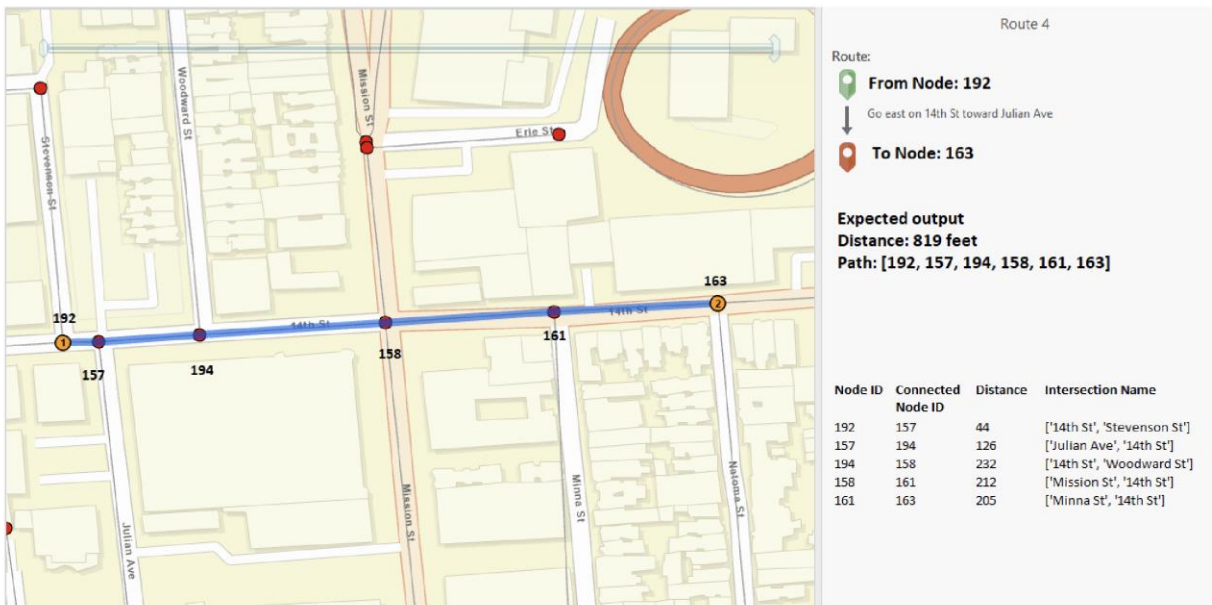
Dijkstra's Using LinkedList Testcase 1:

```
J Dijkstra.java 2    J Dijkstra2D.java 4    J Floyd2D.java 3    J DijkstraLinkedList.java 5 x    J FloydLinkedList.java 1    J DijkstraLL.java

src > main > java > com > assignment > J DijkstraLinkedList.java > DijkstraLinkedList > main(String[])
177      graph.addEdge(Integer.parseInt(nextRecord[nodeIDIndex]), Integer.parseInt(nextRecord[nodeIDIndex+1]), Integer.parseInt(nextRecord[nodeIDIndex+2]));
PROBLEMS 18 OUTPUT DEBUG CONSOLE TERMINAL PORTS

shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argf1
le com.assignment.DijkstraLinkedList
Enter The File Name To Read The Graph
4
Enter the source vertex:
192
Enter the destination vertex:
163
Shortest path from 192 to 163: [192, 157, 194, 158, 161, 163]
Distance: 819
shusritavenugopal@Shusritas-MacBook-Air assignments %
```

Test Case 1 (Project2_Input_File4.csv)



Dijkstra's Using LinkedList Testcase 2:

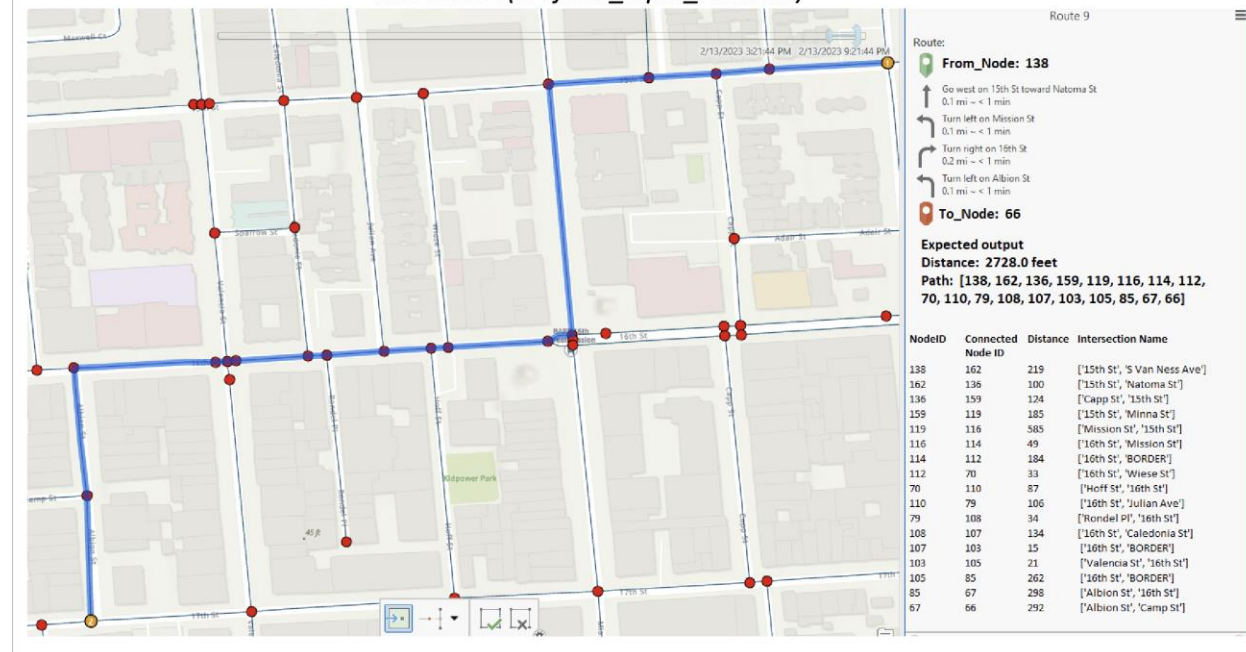
```
J Dijkstra.java 2 J Dijkstras2D.java 4 J Floyds2D.java 3 J DijkstrasLinkedList.java 5 X J FloydsLinkedList.java 1 J DijkstraLL.java

src > main > java > com > assignment > J DijkstrasLinkedList.java > DijkstrasLinkedList > main(String[])

PROBLEMS 18 OUTPUT DEBUG CONSOLE TERMINAL PORTS

shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argf1 le com.assignment.DijkstrasLinkedList
Enter The File Name To Read The Graph
4
Enter the source vertex:
138
Enter the destination vertex:
66
Shortest path from 138 to 66: [138, 162, 136, 159, 119, 116, 114, 112, 70, 110, 79, 108, 107, 103, 105, 85, 67, 66]
Distance: 2728
shusritavenugopal@Shusritas-MacBook-Air assignments %
```

Test Case 2 (Project2_Input_File4.csv)



Dijkstra's Using LinkedList Testcase 3:

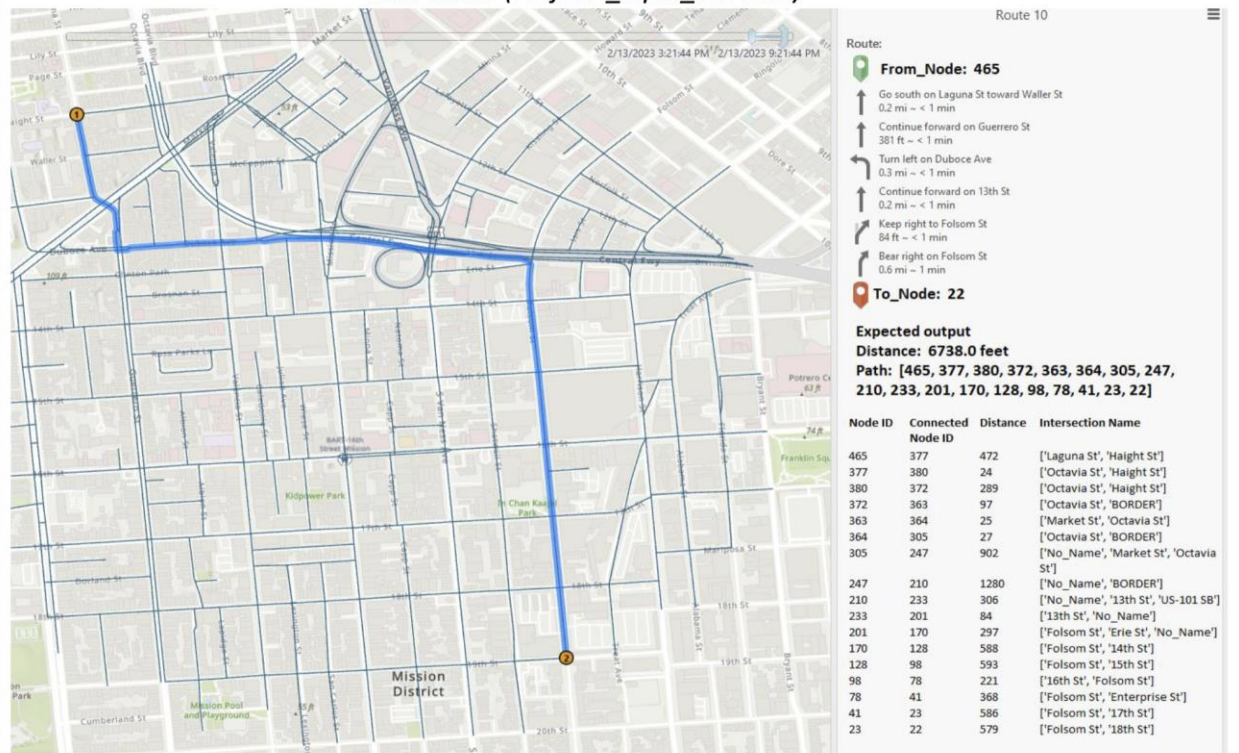
```
J Dijkstra.java 2 J Dijkstra2D.java 4 J Floyds2D.java 3 J DijkstraLinkedList.java 5 x J FloydsLinkedList.java 1 J DijkstraLL.java

src > main > java > com > assignment > J DijkstraLinkedList.java > DijkstraLinkedList > main(String[])

PROBLEMS 18 OUTPUT DEBUG CONSOLE TERMINAL PORTS

shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argf1
le com.assignment.DijkstraLinkedList
Enter The File Name To Read The Graph
4
Enter the source vertex:
465
Enter the destination vertex:
22
Shortest path from 465 to 22: [465, 377, 380, 372, 363, 364, 305, 247, 210, 233, 201, 170, 128, 98, 78, 41, 23, 22]
Distance: 6738
shusritavenugopal@Shusritas-MacBook-Air assignments %
```

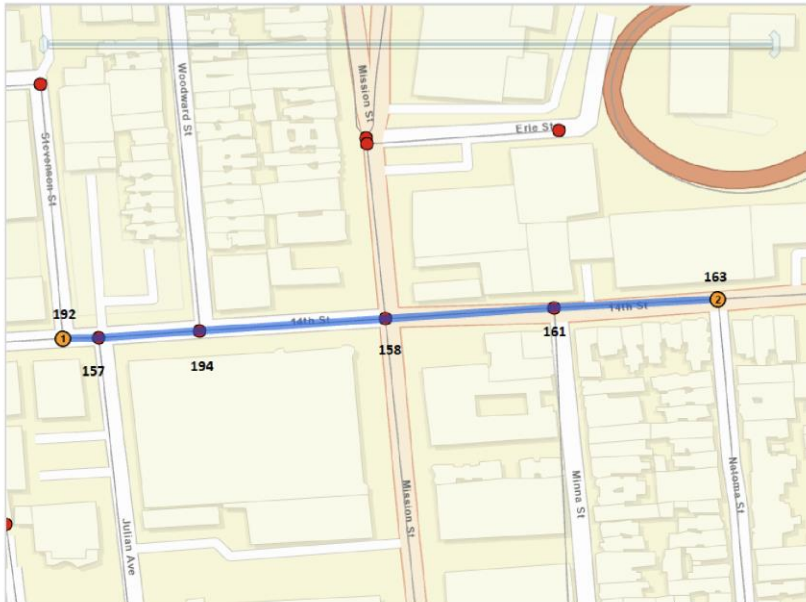
Test Case 3 (Project2_Input_File4.csv)



Floyd's Using 2D Array Test Case 1:

```
shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argf1 le com.assignment.Floyds2D
Enter The File Name To Read The Graph
4
Enter the source vertex:
192
Enter the destination vertex:
163
Shortest Distance from Node 192 to Node 163: 819
Shortest Path from Node 192 to Node 163: 192,157,194,158,161,163
elapsedTime:3417861708
Memory used: 9397360 bytes
```

Test Case 1 (Project2_Input_File4.csv)



Route 4

Route:

From Node: 192

Go east on 14th St toward Julian Ave

To Node: 163

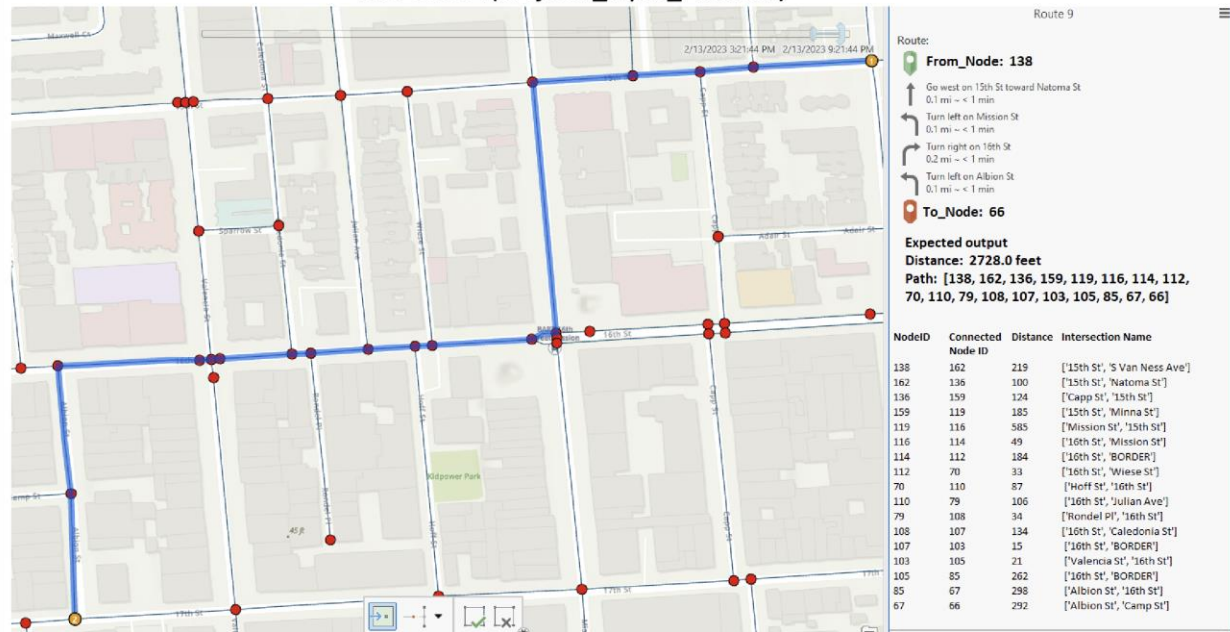
Expected output
Distance: 819 feet
Path: [192, 157, 194, 158, 161, 163]

Node ID	Connected Node ID	Distance	Intersection Name
192	157	44	['14th St', 'Stevenson St']
157	194	126	['Julian Ave', '14th St']
194	158	232	['14th St', 'Woodward St']
158	161	212	['Mission St', '14th St']
161	163	205	['Minna St', '14th St']

Floyd's Using 2D Array Test Case 2:

```
shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argf1
le com.assignment.Floyds2D
Enter The File Name To Read The Graph
4
Enter the source vertex:
138
Enter the destination vertex:
66
Shortest Distance from Node 138 to Node 66: 2728
Shortest Path from Node 138 to Node 66: 138,162,136,159,119,116,114,112,70,110,79,108,107,103,105,85,67,66
elapsedTime:3097201583
Memory used: 9397360 bytes
```

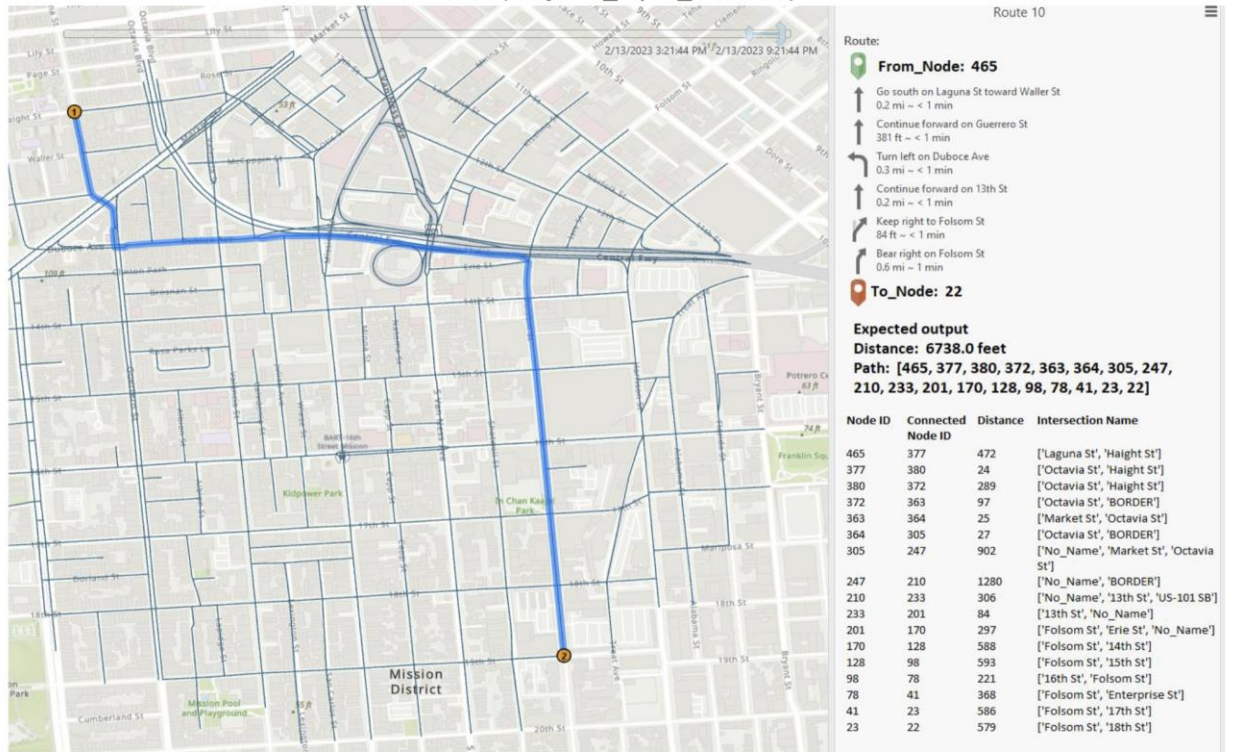
Test Case 2 (Project2_Input_File4.csv)



Floyd's Using 2D Array Test Case 3:

```
shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argfile com.assignment.Floyds2D
Enter The File Name To Read The Graph
4
Enter the source vertex:
465
Enter the destination vertex:
22
Shortest Distance from Node 465 to Node 22: 6738
Shortest Path from Node 465 to Node 22: 465,377,380,372,363,364,305,247,210,233,201,170,128,98,78,41,23,22
elapsedTime:18742792583
Memory used: 9397360 bytes
```

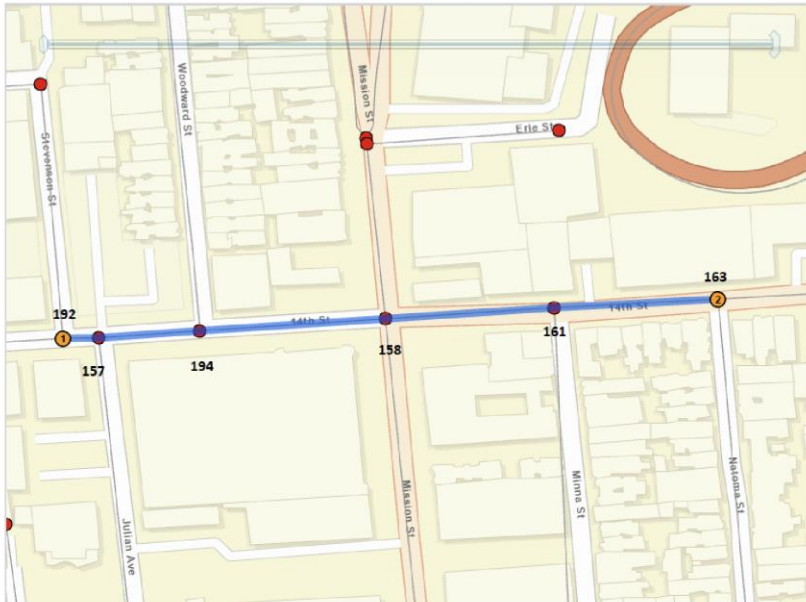
Test Case 3 (Project2_Input_File4.csv)



Floyd's Using LinkedList Test Case 1:

```
shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argfi
le com.assignment.FloydsLinkedList
Enter The File Name To Read The Graph
4
Enter the source vertex:
192
Enter the destination vertex:
163
Shortest Distance from Vertex 192 to Vertex 163: 819
Shortest Path: Vertex 192 -> Vertex 157 -> Vertex 194 -> Vertex 158 -> Vertex 161 -> Vertex 163
elapsedTime:18607648750
Memory used: 8350584 bytes
```

Test Case 1 (Project2_Input_File4.csv)



Route: 4

From Node: 192
Go east on 14th St toward Julian Ave

To Node: 163

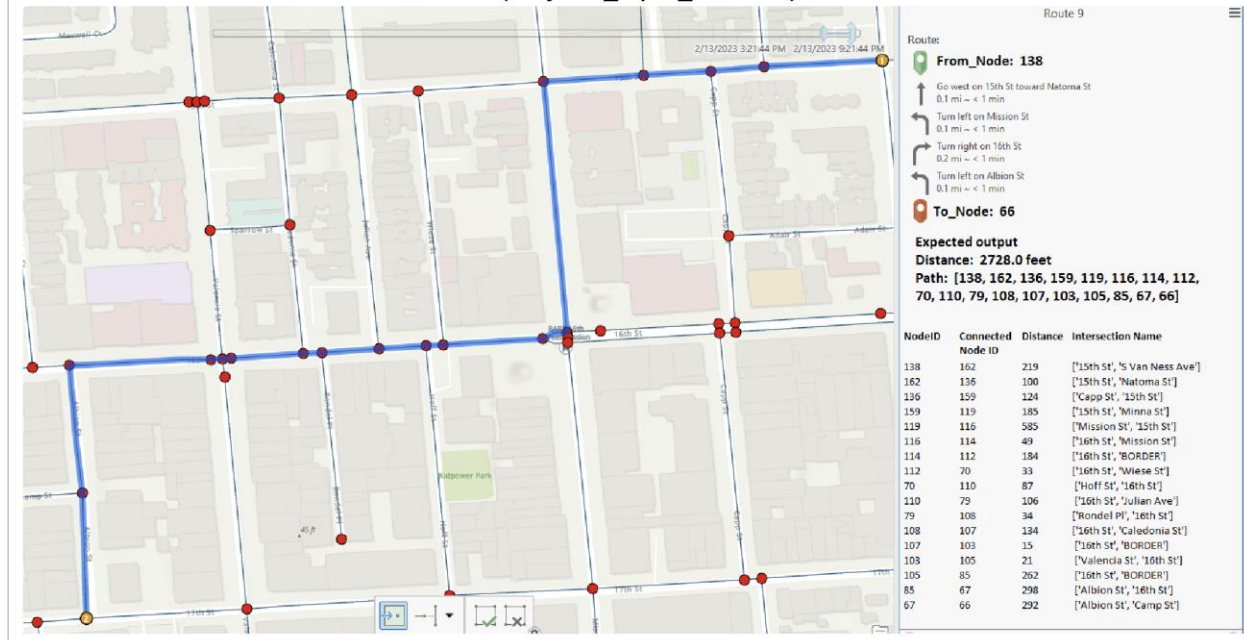
Expected output
Distance: 819 feet
Path: [192, 157, 194, 158, 161, 163]

Node ID	Connected Node ID	Distance	Intersection Name
192	157	44	['14th St', 'Stevenson St']
157	194	126	['Julian Ave', '14th St']
194	158	232	['14th St', 'Woodward St']
158	161	212	['Mission St', '14th St']
161	163	205	['Minna St', '14th St']

Floyd's Using LinkedList Test Case 2:

```
shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_r195k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argfile com.assignment.FloydsLinkedList
Enter The File Name To Read The Graph
4
Enter the source vertex:
138
Enter the destination vertex:
66
Shortest Distance from Vertex 138 to Vertex 66: 2728
Shortest Path: Vertex 138 -> Vertex 162 -> Vertex 136 -> Vertex 159 -> Vertex 119 -> Vertex 116 -> Vertex 114 -> Vertex 112 -> Vertex 70 -> Vertex 110 -> Vertex 79 -> Vertex 108 -> Vertex 107 -> Vertex 103 -> Vertex 105 -> Vertex 85 -> Vertex 67 -> Vertex 66
elapsedTime:6997580584
Memory used: 8349920 bytes
```

Test Case 2 (Project2_Input_File4.csv)



Floyd's Using LinkedList Test Case 3:

```
shusritavenugopal@Shusritas-MacBook-Air assignments % cd /Users/shusritavenugopal/Desktop/AlgorithmDesign/assignments ; /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java @/var/folders/3l/hp2znwrj0rv_rl95k6pf5lwc0000gn/T/cp_ej10wsz3cnybkou1s3zakapa4.argfile com.assignment.FloydsLinkedList
Enter The File Name To Read The Graph
4
Enter the source vertex:
465
Enter the destination vertex:
22
Shortest Distance from Vertex 465 to Vertex 22: 6738
Shortest Path: Vertex 465 -> Vertex 377 -> Vertex 380 -> Vertex 372 -> Vertex 363 -> Vertex 364 -> Vertex 305 -> Vertex 247 -> Vertex 210 -> Vertex 233 -> Vertex 201 -> Vertex 170 -> Vertex 128 -> Vertex 98 -> Vertex 78 -> Vertex 41 -> Vertex 23 -> Vertex 22
elapsedTime:14172969334
Memory used: 8350584 bytes
```

Test Case 3 (Project2_Input_File4.csv)

