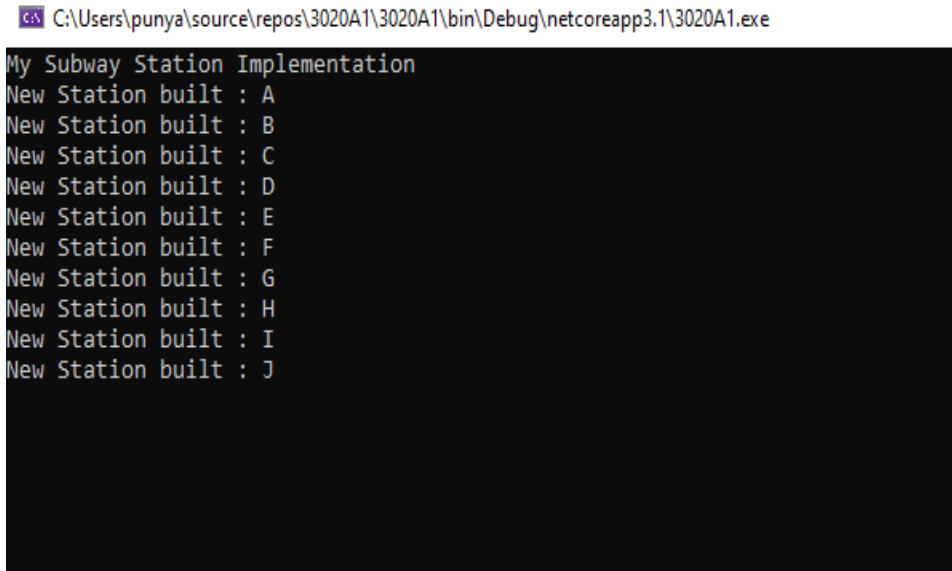


Testing Documentation

COIS 3020H : Assignment 1

Test 1	
<i>Input</i>	Inserting stations in the subway map to check <i>InsertStation()</i>
<i>Output</i>	

Test 2	
<i>Input</i>	Finding an existing station to check <i>FindStation()</i>
<i>Output</i>	<pre>My Subway Station Implementation new Station built : A new Station built : B new Station built : C new Station built : D new Station built : E new Station built : F new Station built : G new Station built : H new Station built : I new Station built : J Connection between : J AND A color : RED Connection between : A AND B color : RED Connection between : B AND C color : BLUE Connection between : B AND D color : YELLOW Connection between : C AND D color : YELLOW Connection between : C AND F color : GREEN Connection between : C AND E color : ORANGE Connection between : D AND H color : PINK Connection between : H AND F color : VIOLET Connection between : E AND G color : ORANGE if -1 then not found else found at position is printed : 0</pre>

Test 3	
<i>Input</i>	Insert connections between the stations in the map to check <i>InsertConnection()</i>
<i>Output</i>	<pre>ew Station built : J onnection between : J AND A color : RED onnection between : A AND B color : RED onnection between : B AND C color : BLUE onnection between : B AND D color : YELLOW onnection between : C AND D color : YELLOW onnection between : C AND F color : GREEN onnection between : C AND E color : ORANGE onnection between : D AND H color : PINK onnection between : H AND F color : VIOLET onnection between : E AND G color : ORANGE</pre>

Test 4	
<i>Input</i>	Implementing the finding shortest/ <i>fastest route</i> method that uses <i>Breadth First Search</i> .
<i>Output</i>	<pre>Connection between : E AND G color : ORANGE f -1 then not found else found at position fastest distance between F and B is : FCB</pre>

Test 5	
<i>Input</i>	Implementing the finding <i>critical connections</i> method that uses <i>Depth First Search</i> .
<i>Output</i>	<pre>Connection between : C AND D color Connection between : C AND F color Connection between : C AND E color Connection between : D AND H color Connection between : H AND F color Connection between : E AND G color If -1 then not found else found at Fastest distance between F and B is Critical Connection Points : A</pre>

Test 6	
<i>Input</i>	Removing a connection to check <i>RemoveConnection()</i>
<i>Output</i>	<pre>Connection between : B AND D color : Y Connection between : C AND D color : Y Connection between : C AND F color : G Connection between : C AND E color : O Connection between : D AND H color : P Connection between : H AND F color : V Connection between : E AND G color : O If -1 then not found else found at pos Fastest distance between F and B is : Critical Connection Points : A Connection removed BETWEEN B and D</pre>

Test 7	
Input	Removing a Station to check <i>RemoveStation()</i>
Output	Connection removed BETWEEN A and B Connection removed BETWEEN B and A No connection from B to A Connection removed BETWEEN B and A No connection from B to A Connection removed BETWEEN B and A No connection from B to A Connection removed BETWEEN B and A No connection from B to A Connection removed BETWEEN B and A No connection from B to A Connection removed BETWEEN B and A No connection from B to A Connection removed BETWEEN B and A No connection from B to A Connection removed BETWEEN C and A Connection removed BETWEEN C and A No connection from C to A Connection removed BETWEEN C and A Connection removed BETWEEN C and A No connection from C to A Connection removed BETWEEN C and A Connection removed BETWEEN C and A No connection from C to A Connection removed BETWEEN C and A Connection removed BETWEEN C and A No connection from C to A Connection removed BETWEEN C and A Connection removed BETWEEN C and A No connection from C to A Connection removed BETWEEN C and A Connection removed BETWEEN C and A No connection from C to A Connection removed BETWEEN C and A Connection removed BETWEEN C and A No connection from C to A No connection from D to A No connection from D to A No connection from D to A No connection from D to A No connection from D to A No connection from D to A No connection from D to A No connection from E to A No connection from E to A No connection from E to A No connection from E to A No connection from E to A No connection from E to A No connection from E to A No connection from E to A No connection from H to A No connection from H to A No connection from H to A No connection from H to A No connection from H to A No connection from H to A No connection from H to A Connection removed BETWEEN J and A Station : A is now burnt to ground

Test 8	
<i>Input</i>	Finding a not existing station (the one we removed, this helps us show that program correctly shows that the station does not exist and also that it was removed correctly. Function used <i>FindStation()</i>
<i>Output</i>	<pre>Station : A is now burnt to ground If -1 then not found else found at position is printed : -1</pre>

All the functions have been checked.

My map :

