TEST CASE DESIGN

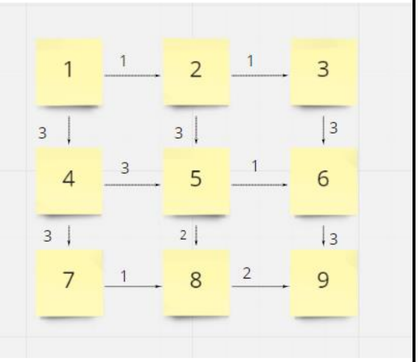
Scenarios:

Name	Class	Scenary
setUpEscenary1	Graph	DirectedGraph
setUpscenary2	Graph	UndirectedGraph

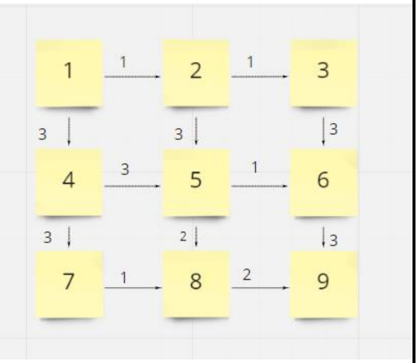
Test Objective: Search the vertex in one directed graph

Class	Method	Scenary	Input	Output
Graph	searchVertex()	setupScenary 1	2	[2, 3]

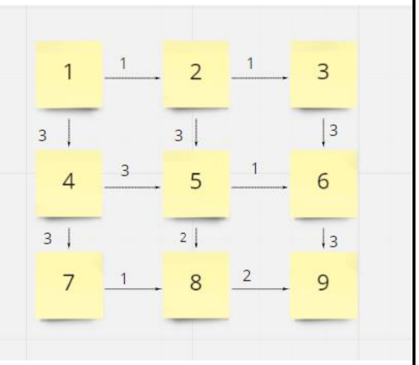
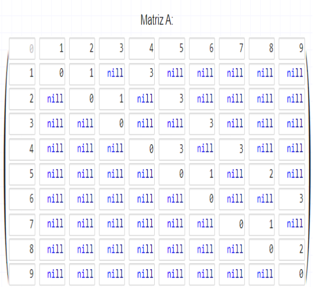
Test Objective: Use the Dijkstra algorithm to search the amount tokens to give the player

Class	Method	Scenary	Input	Output
Graph	Dijkstra ()	setupScenary 1	 1 1 2 1 3 3 3 3 4 3 5 1 6 3 2 3 7 1 8 2 9	8

Test Objective: return the best way to win the game

Class	Method	Scenary	Input	Output
Graph	getPath()	setupScenary 1	 1 1 2 1 3 3 3 3 4 3 5 1 6 3 2 3 7 1 8 2 9	[1,2,5,8]

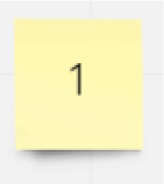
Test Objective: Use the Floyd algorithm to search the best way in any pair of vertex

Class	Method	Scenary	Input	Output
Graph	floydWarshall()	setupScenary 1	 1 2 3 4 5 6 7 8 9 1 1 3 3 3 3 1 3 2 3 1 2	

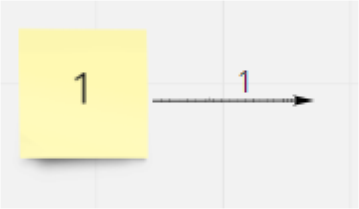
Matriz A:

0	1	2	3	4	5	6	7	8	9
1	0	1	nill	3	nill	nill	nill	nill	nill
2	nill	0	1	nill	3	nill	nill	nill	nill
3	nill	nill	0	nill	nill	3	nill	nill	nill
4	nill	nill	nill	0	3	nill	3	nill	nill
5	nill	nill	nill	nill	0	1	nill	2	nill
6	nill	nill	nill	nill	nill	0	nill	nill	3
7	nill	nill	nill	nill	nill	nill	0	1	nill
8	nill	nill	nill	nill	nill	nill	nill	0	2
9	nill	nill	nill	nill	nill	nill	nill	nill	0

Test Objective: add the vertex in one directed graph

Class	Method	Scenary	Input	Output
Graph	addVertex()	setupScenary 1		The vertex 1 was created successfully

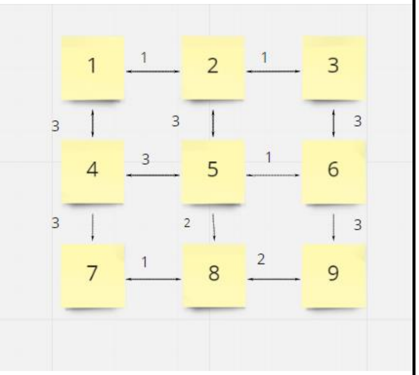
Test Objective: add the edge to one directed graph

Class	Method	Scenary	Input	Output
Graph	addEdge()	setupScenary 1		The edge with the height was created successfully

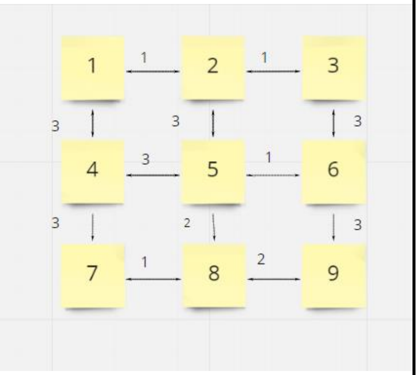
Test Objective: Search the vertex in one undirected graph

Class	Method	Scenary	Input	Output
Graph	searchVertex()	setupScenary 2	2	[2.3]

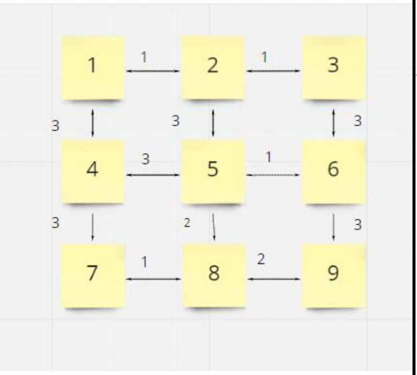
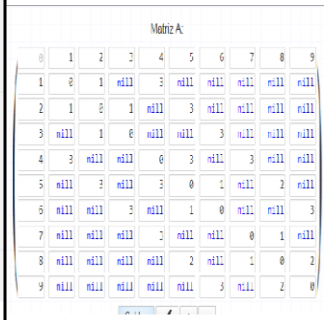
Test Objective: Use the Dijkstra algorithm to search the amount tokens to give the player

Class	Method	Scenary	Input	Output
Graph	Dijkstra ()	setupScenary 2	 1 1 2 1 3 3 3 3 4 3 5 1 6 3 2 3 7 1 8 2 9	8

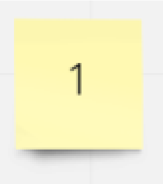
Test Objective: return the best way to win the game

Class	Method	Scenary	Input	Output
Graph	getPath()	setupScenary 2	 1 1 2 1 3 3 3 3 4 3 5 1 6 3 2 3 7 1 8 2 9	[1,2,5,8]

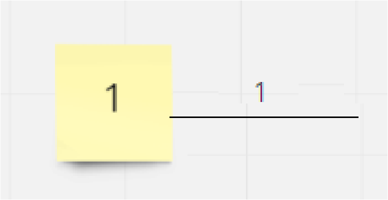
Test Objective: Use the Floyd algorithm to search the best way in any pair of vertex

<table>
<tr><th>Class</th><th>Method</th><th>Scenary</th><th>Input</th><th>Output</th></tr>
<tr><td>Graph</td><td>floydWarshall()</td><td>setupScenary 2</td><td> </td><td>Matriz A:<table>
<tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr>
<tr><td>1</td><td>0</td><td>1</td><td>nill</td><td>3</td><td>nill</td><td>nill</td><td>nill</td><td>nill</td><td>nill</td></tr>
<tr><td>2</td><td>1</td><td>0</td><td>1</td><td>nill</td><td>3</td><td>nill</td><td>nill</td><td>nill</td><td>nill</td></tr>
<tr><td>3</td><td>nill</td><td>1</td><td>0</td><td>nill</td><td>nill</td><td>3</td><td>nill</td><td>nill</td><td>nill</td></tr>
<tr><td>4</td><td>3</td><td>nill</td><td>nill</td><td>0</td><td>3</td><td>nill</td><td>3</td><td>nill</td><td>nill</td></tr>
<tr><td>5</td><td>nill</td><td>3</td><td>nill</td><td>3</td><td>0</td><td>1</td><td>nill</td><td>2</td><td>nill</td></tr>
<tr><td>6</td><td>nill</td><td>nill</td><td>3</td><td>nill</td><td>1</td><td>0</td><td>nill</td><td>nill</td><td>3</td></tr>
<tr><td>7</td><td>nill</td><td>nill</td><td>nill</td><td>3</td><td>nill</td><td>nill</td><td>0</td><td>1</td><td>nill</td></tr>
<tr><td>8</td><td>nill</td><td>nill</td><td>nill</td><td>nill</td><td>2</td><td>nill</td><td>1</td><td>0</td><td>2</td></tr>
<tr><td>9</td><td>nill</td><td>nill</td><td>nill</td><td>nill</td><td>nill</td><td>3</td><td>nill</td><td>2</td><td>0</td></tr>
</table></td></tr>
</table>

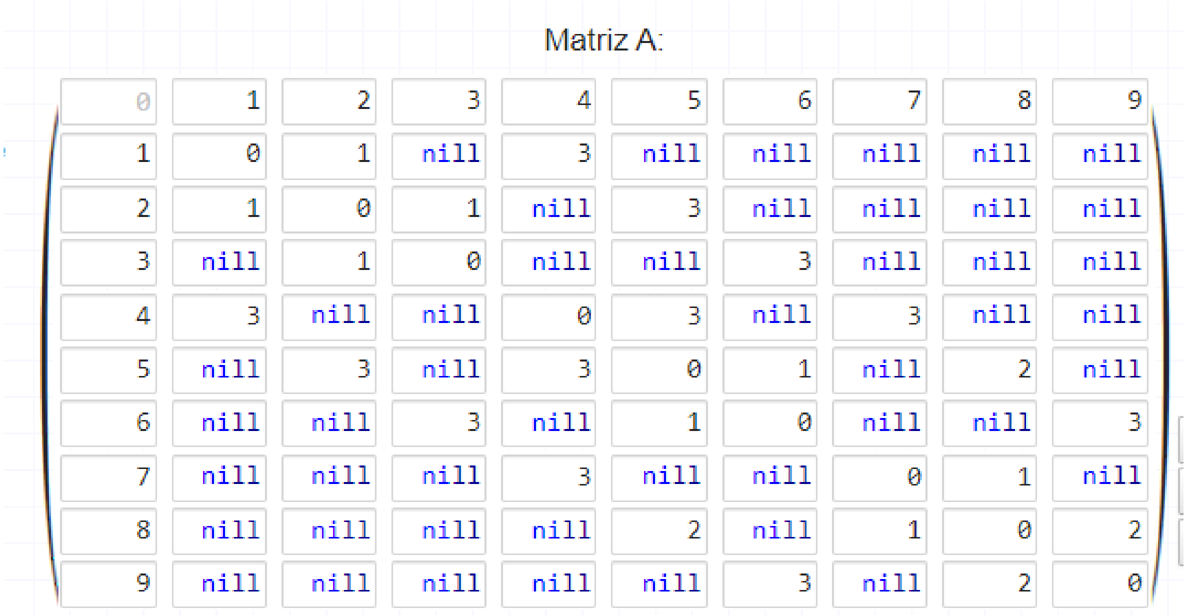
Test Objective: add the vertex in one undirected graph

Class	Method	Scenary	Input	Output
Graph	addVertex()	setupScenary 2		The vertex 1 was created successfully

Test Objective: add the edge to one undirected graph

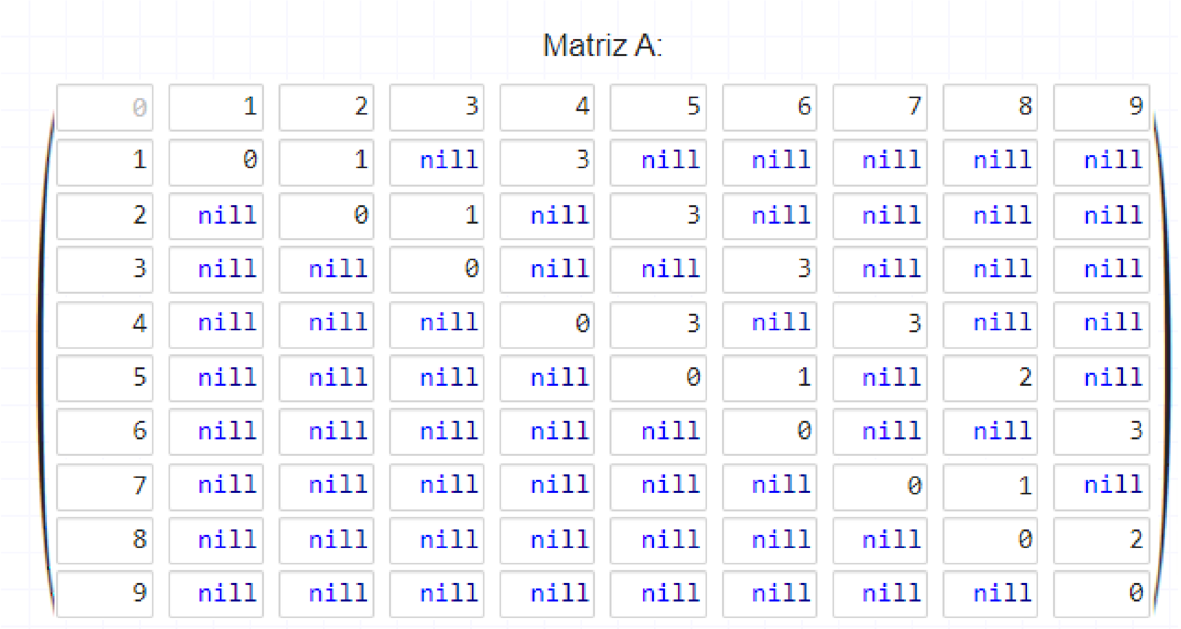
Class	Method	Scenary	Input	Output
Graph	addEdge()	setupScenary 2		The edge with the height was created successfully

If you can’t see the matrix images in Floyd algorithm.



Matriz A:

0	1	2	3	4	5	6	7	8	9
1	0	1	nill	3	nill	nill	nill	nill	nill
2	1	0	1	nill	3	nill	nill	nill	nill
3	nill	1	0	nill	nill	3	nill	nill	nill
4	3	nill	nill	0	3	nill	3	nill	nill
5	nill	3	nill	3	0	1	nill	2	nill
6	nill	nill	3	nill	1	0	nill	nill	3
7	nill	nill	nill	3	nill	nill	0	1	nill
8	nill	nill	nill	nill	2	nill	1	0	2
9	nill	nill	nill	nill	nill	3	nill	2	0



Matriz A:

0	1	2	3	4	5	6	7	8	9
1	0	1	nill	3	nill	nill	nill	nill	nill
2	nill	0	1	nill	3	nill	nill	nill	nill
3	nill	nill	0	nill	nill	3	nill	nill	nill
4	nill	nill	nill	0	3	nill	3	nill	nill
5	nill	nill	nill	nill	0	1	nill	2	nill
6	nill	nill	nill	nill	nill	0	nill	nill	3
7	nill	nill	nill	nill	nill	nill	0	1	nill
8	nill	nill	nill	nill	nill	nill	nill	0	2
9	nill	nill	nill	nill	nill	nill	nill	nill	0