### **Unit Cases Tests**

111	112	113	114	115	116	117	118	119	120	121
∞	∞	∞	∞	∞	21	∞	∞	∞	∞	∞
100	101	102	103	104	105	106	107	108	109	110
∞	∞	∞	∞	∞	20	∞	∞	∞	∞	∞
89	90	91	92	93	94	95	96	97	98	99
$\infty$	∞	∞	∞	18	19	∞	∞	∞	∞	∞
78	79	80	81	82		84	85	86	87	88
∞	∞	∞	∞	17	X	∞	∞	∞	∞	∞
67	68	69	70	71	72	73	74	75	76	77
∞	∞	∞	∞	16	15	14	13	∞	∞	∞
56	57	58					63		65	66
∞	∞	∞	X	X	X	X	12	X	∞	∞
45	46	47	48	49	50	51	52	53	54	55
∞	∞	∞	7	8	9	10	11	∞	∞	∞
34	35	36	37			40		42	43	44
∞	∞	∞	6	X	X	∞	X	∞	∞	∞
23	24	25	26	27	28	29	30	31	32	33
∞	∞	∞	5	4	3	∞	∞	∞	∞	∞
12	13	14	15	16	17	18	19	20	21	22
∞	00	oo	∞	oo	2	00	oo	∞	∞	∞
1	2	3	4	5	6	7	8	9	10	11
∞	∞	∞	∞	∞	1	∞	∞	∞	∞	∞

### UnitCasesTest

#### Scenes:

Name	Class	Scenery
testScene1	GraphA	Create a graph A with 5 vertex
testScene2	GraphA	Create a graphA with 5 vertex and link them with edges

testScene3	GraphA	Create a graphA and link them in two branches

testScene1	GraphB	Create a graph B with 5 vertex
testScene2	GraphB	Create a graphB with 5 vertex and link them with edges
testScene3	GraphB	Create a graphB and link them in two branches

# GraphA

aim: Verify if the graph's edges were created					
Class	Method	Scenery	Input	Output	
GraphA	addOneEdgeTe st	testScene1	A unlinked Graph	A linked graph	

aim: Verify if the graph's edges were created					
Class	Method	Scenery	Input	Output	
GraphA	addMultipleEdg eTest	testScene1	A unlinked Graph	A linked graph	

aim: Verify the distance between vertex					
Class	Method	Scenery	Input	Output	
GraphA	DijkstraTestToN earestVertex	testScene2	A linked Graph	the shortest distance between a origin vertex and his nearest linked vertex	

aim: Verify the distance between vertex						
Class	Method	Scenery	Input	Output		
GraphA	DijkstraTestToF arthestVertex	testScene2	A linked Graph	the shortest distance between a origin vertex and his farthest linked vertex		

aim: Found the smallest edge linked vertex					
Class	Method	Scenery	Input	Output	
GraphA	primSmallerEd ge	testScene2	A linked Graph	Found the smallest edge's link vertex	

aim: Found the last edge linked vertex						
Class	Method	Scenery	Input	Output		
GraphA	primGreaterEdg e	testScene2	A linked Graph	Found the last edge's link vertex		

aim: Found the minor edge linked vertex					
Class	Method	Scenery	Input	Output	
GraphA	KruskalMinorE dge	testScene2	A linked Graph	Found the minor edge's link vertex	

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aim: Found the greatest edge linked vertex					
Class	Method	Scenery	Input	Output	
GraphA	KruskalGreates tEdge	testScene2	A linked Graph	Found the greatest edge's link vertex	

aim: Found the	matrix edge's pos	ition		
Class	Method	Scenery	Input	Output

GraphA	FloydWarshallT	testScene2	A linked	Found the
	est		Graph	matrix edge's position
				Poortion

aim: Found and create trees using the linked graphs					
Class	Method	Scenery	Input	Output	
GraphA	DFSForestTest	testScene3	A linked Graph	Linked graphs trees	

aim: Found the vertex´s son				
Class	Method	Scenery	Input	Output
GraphA	BFSTest	testScene3	A linked Graph	The linked vertex required

# Graph B

aim: Verify if the graph's edges were created				
Class	Method	Scenery	Input	Output

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GraphB	addOneEdgeTe	testScene1	A unlinked	A linked	l
	st		Graph	graph	

aim: Verify if the graph's edges were created

Class Method Scenery Input Output

GraphB addMultipleEdg eTest testScene1 A unlinked Graph graph

aim: Verify the distance between vertex Class Method Scenery Input Output GraphB DijkstraTestToN testScene2 A linked the shortest earestVertex Graph distance between a origin vertex and his nearest linked vertex

aim: Verify the distance between vertex					
Class	Method	Scenery	Input	Output	
GraphB	DijkstraTestToF arthestVertex	testScene2	A linked Graph	the shortest distance between a origin vertex and	

vertex
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aim: Found the smallest edge linked vertex				
Class	Method	Scenery	Input	Output
GraphB	primSmallerEd ge	testScene2	A linked Graph	Found the smallest edge's link vertex

aim: Found the last edge linked vertex					
Class	Method	Scenery	Input	Output	
GraphA	primGreaterEdg e	testScene2	A linked Graph	Found the last edge's link vertex	

aim: Found the minor edge linked vertex					
Class	Method	Scenery	Input	Output	
GraphB	KruskalMinorE dge	testScene2	A linked Graph	Found the minor edge's link vertex	

aim: Found the greatest edge linked vertex					
Class	Method	Scenery	Input	Output	
GraphB	KruskalGreates tEdge	testScene2	A linked Graph	Found the greatest edge's link vertex	

aim: Found the matrix edge's position				
Class	Method	Scenery	Input	Output
GraphB	FloydWarshallT est	testScene2	A linked Graph	Found the matrix edge's position

aim: Found and create trees using the linked graphs					
Class	Method	Scenery	Input	Output	
GraphB	DFSForestTest	testScene3	A linked Graph	Linked graphs trees	

aim: Found the vertex's son					
Class	Method	Scenery	Input	Output	

GraphB	BFSTest	testScene3	A linked	The linked
			Graph	vertex
			-	required