Tecnológico de Monterrey

Implementación de "Dijkstra and Floyd".

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Análisis y diseño de algoritmos avanzados.

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Caso de prueba 1.

Variable	Valor
n	4
graph	[[0, 2, -1, 3,], [-1, 0, 1, 5], [2, 3, 0, -1], [3, -1, 4, 0],]

Salida.

```
numero : 4

----- DIJKSTRA -----

Node 0: [0, 2, -1, 3]
node 0 to node 1: 2
node 0 to node 2: 3
node 0 to node 3: 3
Node 1: [-1, 0, 1, 5]
node 1 to node 0: 3
node 1 to node 2: 1
node 1 to node 3: 5
Node 2: [2, 3, 0, -1]
node 2 to node 0: 2
node 2 to node 1: 3
node 2 to node 3: 5
Node 3: [3, -1, 4, 0]
node 3 to node 0: 3
node 3 to node 1: 5
node 3 to node 2: 4

----- FLOYD-WARSHALL -----

0 2 3 3
3 0 1 5
2 3 0 5
3 5 4 0
```

Caso de prueba 2.

Variable	Valor
n	`4`

graph
 	
(Todos los nodos conectados)
	`graph = [`
	`  [0, 1, 4, 6],`
	`  [1, 0, 2, 3],`
	`  [4, 2, 0, 5],`
	`  [6, 3, 5, 0]`
	`]`

Salida.

```
numero : 4

----- DIJKSTRA -----

Node 0: [0, 1, 4, 6]
node 0 to node 1: 1
node 0 to node 2: 3
node 0 to node 3: 4
Node 1: [1, 0, 2, 3]
node 1 to node 0: 1
node 1 to node 2: 2
node 1 to node 3: 3
Node 2: [4, 2, 0, 5]
node 2 to node 0: 3
node 2 to node 1: 2
node 2 to node 3: 5
Node 3: [6, 3, 5, 0]
node 3 to node 0: 4
node 3 to node 1: 3
node 3 to node 2: 5

----- FLOYD-WARSHALL -----

0 1 3 4
1 0 2 3
3 2 0 5
4 3 5 0
```

Caso de prueba 3.

Variable	Valor
n	`5`
graph	`graph = [ [0, 1, 4, 6, 0], [1, 0, 2, 3, 0], [4, 2, 0, 5, 9], [6, 3, 5, 0, 0], [0, 0, 9, 0, 0], ]`

Salida.

```
numero : 5

----- DIJKSTRA -----

Node 0: [0, 1, 4, 6, 0]
node 0 to node 1: 0
node 0 to node 2: 2
node 0 to node 3: 0
node 0 to node 4: 0
Node 1: [1, 0, 2, 3, 0]
node 1 to node 0: 0
node 1 to node 2: 2
node 1 to node 3: 0
node 1 to node 4: 0
Node 2: [4, 2, 0, 5, 9]
node 2 to node 0: 2
node 2 to node 1: 2
node 2 to node 3: 2
node 2 to node 4: 2
Node 3: [6, 3, 5, 0, 0]
node 3 to node 0: 0
node 3 to node 1: 0
node 3 to node 2: 2
node 3 to node 4: 0
Node 4: [0, 0, 9, 0, 0]
node 4 to node 0: 0
node 4 to node 1: 0
node 4 to node 2: 2
node 4 to node 3: 0

----- FLOYD-WARSHALL -----

0 0 2 0 0
0 0 2 0 0
2 2 0 2 2
0 0 2 0 0
0 0 2 0 0
```

Caso de prueba 4.

Variable	Valor
n	`3`
graph	`graph = [ [0, 1, 0], [3, 1, 4], [0, 4, 1] ]`

Salida.

```
numero : 3

----- DIJKSTRA -----

Node 0: [0, 1, 0]
node 0 to node 1: 1
node 0 to node 2: 0
Node 1: [3, 1, 4]
node 1 to node 0: 3
node 1 to node 2: 3
Node 2: [0, 4, 1]
node 2 to node 0: 0
node 2 to node 1: 1

----- FLOYD-WARSHALL ---

0 1 0
3 1 3
0 1 0
```