



Universidad Politécnica Salesiana

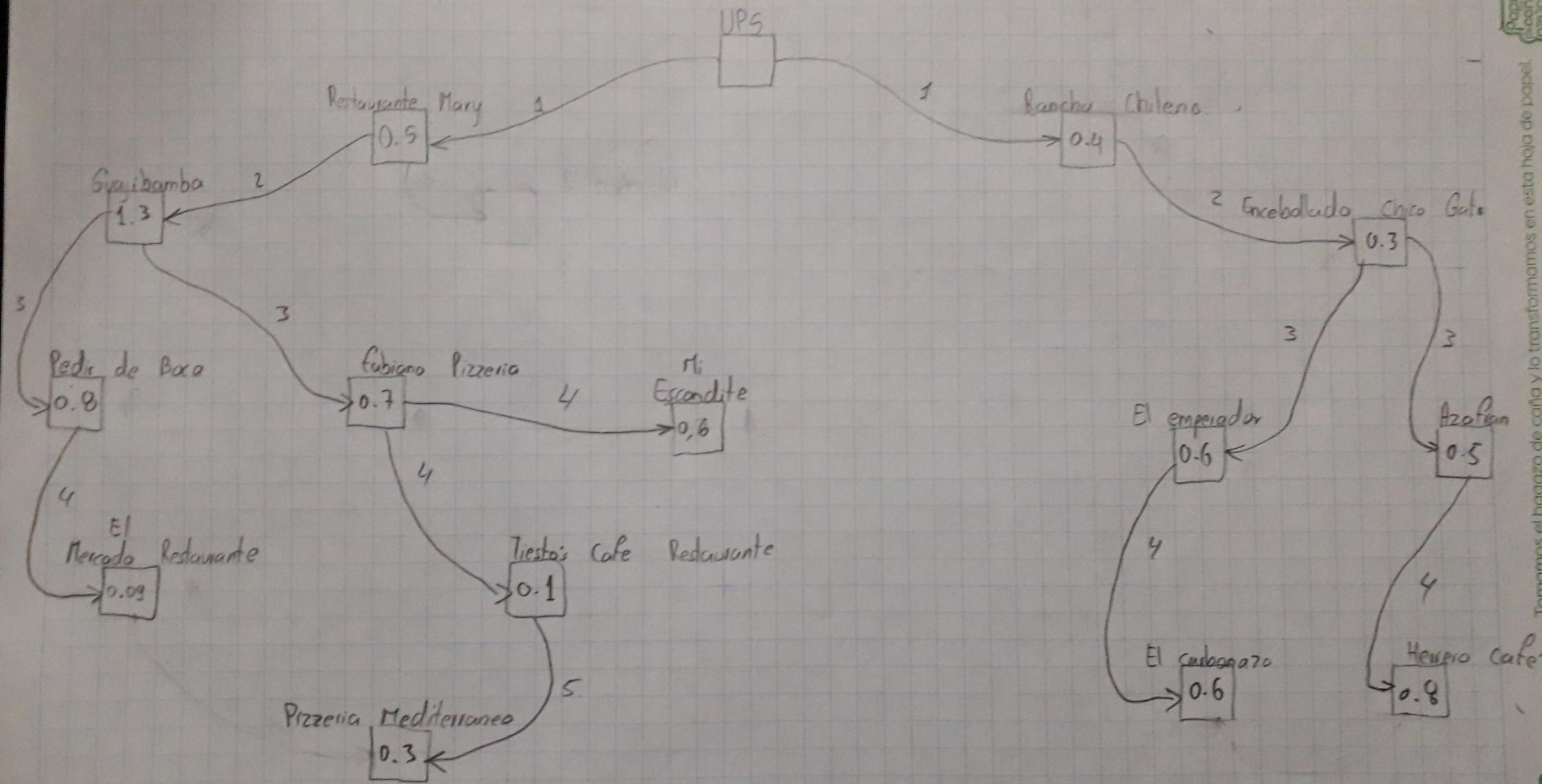
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Profesor: Ing. Diego Quisi

Materia: Inteligencia Artificial I

Restaurantes



Inicio: UPS

Objetivo: Herrero Café

1) Nodos Cercanos \rightarrow Nivel 1

Visitado: UPS, Rancho Chileno

2) Nivel 2

Visitado: UPS, Rancho Chileno, Encebollado Chico Gato,

3) Nivel 3

Visitado: UPS, Rancho Chileno, Encebollado Chico Gato, Azafrán

4) Nivel 4

Se encuentra el nodo objetivo

Visitado: {UPS, Rancho Chileno, Encebollado Chico Gato, Azafrán
Herrero Café}

Solución

Costo = 2

Código Neo4j

```
CREATE (a:Loc {name: 'UPS'}) ,  
       (b:Loc {name: 'Restaurante Mary'}) ,  
       (c:Loc {name: 'Rancho Chileno'}) ,  
       (d:Loc {name: 'Guajibamba'}) ,  
       (e:Loc {name: 'Encebollado Chico Gato'}) ,  
       (f:Loc {name: 'Pedri de Boca'}) ,  
       (g:Loc {name: 'Fabiano Pizzeria'}) ,  
       (h:Loc {name: 'Mi Escondite'}) ,  
       (i:Loc {name: 'El Emperador'}) ,  
       (j:Loc {name: 'Azafran'}) ,  
       (k:Loc {name: 'Mercado Restaurante'}) ,  
       (l:Loc {name: 'Tiesto's Cafe Restaurante'}) ,  
       (m:Loc {name: 'EL Carbonazo'}) ,  
       (n:Loc {name: 'Herro Cafe'}) ,  
       (o:Loc {name: 'Pizzeria Mediterraneo'}) ,  
       (a)-[:ROAD {cost: 0.5}]->(b) ,  
       (a)-[:ROAD {cost: 0.4}]->(c) ,  
       (b)-[:ROAD {cost: 1.3}]->(d) ,  
       (c)-[:ROAD {cost: 0.3}]->(e) ,  
       (d)-[:ROAD {cost: 0.8}]->(f) ,  
       (d)-[:ROAD {cost: 0.7}]->(g) ,  
       (e)-[:ROAD {cost: 0.6}]->(i) ,  
       (e)-[:ROAD {cost: 0.5}]->(j) ,  
       (f)-[:ROAD {cost: 0.09}]->(k) ,  
       (g)-[:ROAD {cost: 0.6}]->(h) ,  
       (g)-[:ROAD {cost: 0.1}]->(l) ,  
       (i)-[:ROAD {cost: 0.6}]->(m) ,  
       (j)-[:ROAD {cost: 0.8}]->(n) ,  
       (l)-[:ROAD {cost: 0.3}]->(o) ;
```

```

neo4j$ CREATE (a:Loc {name: 'UPS'}), (b:Loc {name: 'Restaurante Mary'}), (c:Loc {name: 'Rancho Chileno'}), (d:Loc {name: 'Guajibamba'}), (e:Loc {name: 'Encebollado...'})
Added 15 labels, created 15 nodes, set 29 properties, created 14 relationships, completed after 4 ms.

Table
Code

```

Added 15 labels, created 15 nodes, set 29 properties, created 14 relationships, completed after 4 ms.

```

MATCH (start:Loc {name: 'UPS'}), (end:Loc {name: 'Herro Cafe'})
CALL gds.alpha.shortestPath.stream({
    nodeQuery:'MATCH(n:Loc) RETURN id(n) AS id',
    relationshipQuery:'MATCH(n:Loc)-[r:ROAD]->(m:Loc) RETURN id(n) AS source, id(m) AS target,
    r.cost AS weight',
    startNode: start,
    relationshipWeightProperty: 'weight',
    endNode: end
})
YIELD nodeId, cost
RETURN gds.util.asNode(nodeId).name AS name, cost

```

	name	cost
A	"UPS"	0.0
T	"Rancho Chileno"	0.4
C	"Encebollado Chico Gato"	0.7
Code	"Azafrañ"	1.2
	"Herro Cafe"	2.0

Started streaming 5 records in less than 1 ms and completed after 9 ms.

```

MATCH (n) RETURN n

```

