

## IMPORT DELLE ZONE DI GENOVA CON LE COORDINATE GEOMETRICHE

```
LOAD CSV WITH HEADERS FROM "file:///zonizzazione.csv" as line
WITH line
MATCH (p:Point)
WHERE p.codZona=toInteger(line.CODICE)
MERGE (p)-[:SITUATED_IN]->(g:Geometry {geometry:line.geometry})
```

COME SPLITTARE I MULTIPOLIGONI PER POI PRENDERE LE COORDINATE

```
match (g:Geometry)
WHERE g.geometry CONTAINS "MULTIPOLYGON"
with apoc.text.replace(g.geometry,"MULTIPOLYGON \(\(\(", "\(\(") as geo,g
with apoc.text.replace(geo,"\)\)\)", "\)\)") as geo,g
with apoc.text.replace(geo,", \(\(", "; \(\(") as geo,g
with apoc.text.replace(geo,"\(\(", "POLYGON \(\(") as geo,g
with apoc.text.split(geo, ";") as geo,g
unwind geo as singleG
return g.geometry as geom, singleG
```

COME SALVARE IN FORMATO LISTA DI COORDINATE I POLIGONI SU NEO4J

```
LOAD CSV WITH HEADERS FROM "file:///coordinates_from_Polygon.csv" as line
WITH line
WHERE line.Coordinates is not null
WITH line.Coordinates as coordinate, line
WITH REPLACE(coordinate, "", "") as coordinate, line
//with replace(split(coordinate, ",")[1], "[", "") as coordinate, line
WITH REPLACE(coordinate, "[", "") as coordinate, line
WITH split(coordinate, ",") as coordinate, line
MATCH (p:Point)-[:SITUATED_IN]->(g:Geometry)
WHERE p.codZona=toInteger(line.CODICE)
UNWIND coordinate as singleC
WITH split(trim(singleC), " ") as coord, p, g
WITH collect(point({latitude:toFloat(coord[0]),longitude:toFloat(coord[1])})) as coordinates, p,
g
SET g.linesCoordinates = coordinates
```

COME SALVARE MULTIPOLIGONO

```
LOAD CSV WITH HEADERS FROM "file:///coordinates_from_Multipol.csv" as line
WITH line
WHERE line.Coordinates is not null
WITH line.Coordinates as coordinate, line
WITH REPLACE(coordinate, "", "") as coordinate, line
WITH REPLACE(coordinate, "[", "") as coordinate, line
WITH split(coordinate, ",") as coordinate, line
```

```

UNWIND coordinate as singleC
WITH split(trim(singleC), " ") as coord,line
WITH collect(point({latitude:toFloat(coord[0]),longitude:toFloat(coord[1])})) as
coordinates,line
MATCH (g:Geometry)
WHERE g.geometry=line.geom
MERGE (g)-[:IS_A_PART_OF_POLYGON]->(s:SinglePolygon
{linesCoordinates:coordinates})

```

risultato dopo import

