

# Lab 1

Explanations for selected queries

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Credits: thanks to Kanishka Ariyapala, Alberto Compagno and Tooska Dargahi for assistance during the course

## Q7) Find for each employee his last name and that of his manager

```
SELECT dependente.lastName AS Dipendente, dirigente.lastName AS Dirige  
FROM employees As dirigente, employees As dependente  
WHERE dirigente.reportsTo=dependente.employeeNumber;
```

- This query uses a self-join, a table joined with itself.
- The **WHERE** clause selects the employee and his manager from the joined rows.
- From the temporarily renamed **Dirigente** table the **WHERE** clause selects the E.ID of the person to report a manager.
- Similarly from the **Dipendente** table **WHERE** clause selects the employee Number (E.ID).
- Combining the results gives an entry with employee and manager details.
- The **SELECT** query selects the Last names of the employee and the manager.

## Q1 1) Name of the cities with at least 3 employees

```
SELECT city  
FROM employees JOIN offices ON (employees.officeCode=offices.officecode)  
GROUP BY city  
HAVING COUNT (city) >3;
```

- The query joins the **Employees** table and the **Offices** table based on office codes.
- Group the results by the city.
- Finally, the query selects the cities which have more than three entries.