



POLITECNICO
MILANO 1863

Elasticsearch

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Elasticsearch - Dataset

You can download the dataset at the following [LINK](#).

The dataset is a collection of employees with the following attributes and types.

- **Address** - Text
- **Age** - Integer
- **DateOfJoining** - Date
- **Designation** - Text
- **FirstName** - Text
- **Gender** - Text
- **Interests** - Text
- **LastName** - Text
- **MaritalStatus** - Text
- **Salary** - Integer

Elasticsearch - Exercises

Write a **full mapping** for the proposed structure, motivating your design choices. Set the number of shards and replicas to 10.

Elasticsearch - Exercises

Write a query to collect all the employees whose first name is “Bob”

Elasticsearch - Exercises

Write a query to collect all the employees whose salary is greater than 80'000 and less than 95'000.

Elasticsearch - Exercises

Write a query to collect all the employees whose age is 31.

Elasticsearch - Exercises

Write a query to collect all the employees who joined later than 03/09/2015.

Elasticsearch - Exercises

Write a query to collect all the employees whose gender is exactly “Male”.

Elasticsearch - Exercises

Write a query to collect all the employees whose first name is “Moses” and whose last name is “Daschofsky”.

Elasticsearch - Exercises

Write a query to collect all the employees whose interests contains the words “Paragliding”, “Kayaking”, and “Playing”. The more words are found, the higher the final score.

Elasticsearch - Exercises

Write a query to collect all the employees whose name is “Elden”, assigning a higher score those whose designation is “Delivery Manager”.

Elasticsearch - Exercises

Write a query to collect all the employees whose last name is “Weatherly” and whose salary is greater than 50'000. The name should not affect the final score.

Elasticsearch - Exercises

Write a query to collect all the employees whose designation is “Manager”, assigning a higher score to those whose gender is “Female” and those who are “Married”.

Elasticsearch - Exercises

Write a query to collect all the employees whose designation is “Manager” or “Delivery Manager” and whose salary is not higher than 150'000. Assign a higher score to those whose interests includes “Blogging”.

Elasticsearch - Exercises

Write a query to count the number of employees based on their gender and designation.

Elasticsearch - Exercises

Write a query to count the number of employees based on their gender. Then, compute the number of people based on their age for each gender.