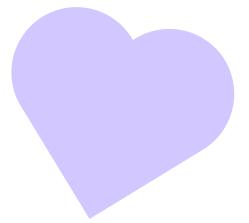


**OpenSearch helps you  
to adopt a friend**

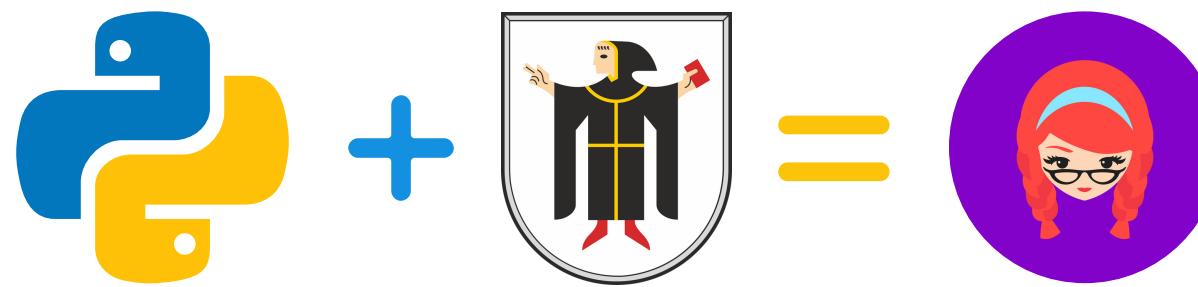


@laysauchoa

# self.intro()



@laysauchoa



# Structure

**Part 1:** OpenSearch overview

**Part 2:** Search queries

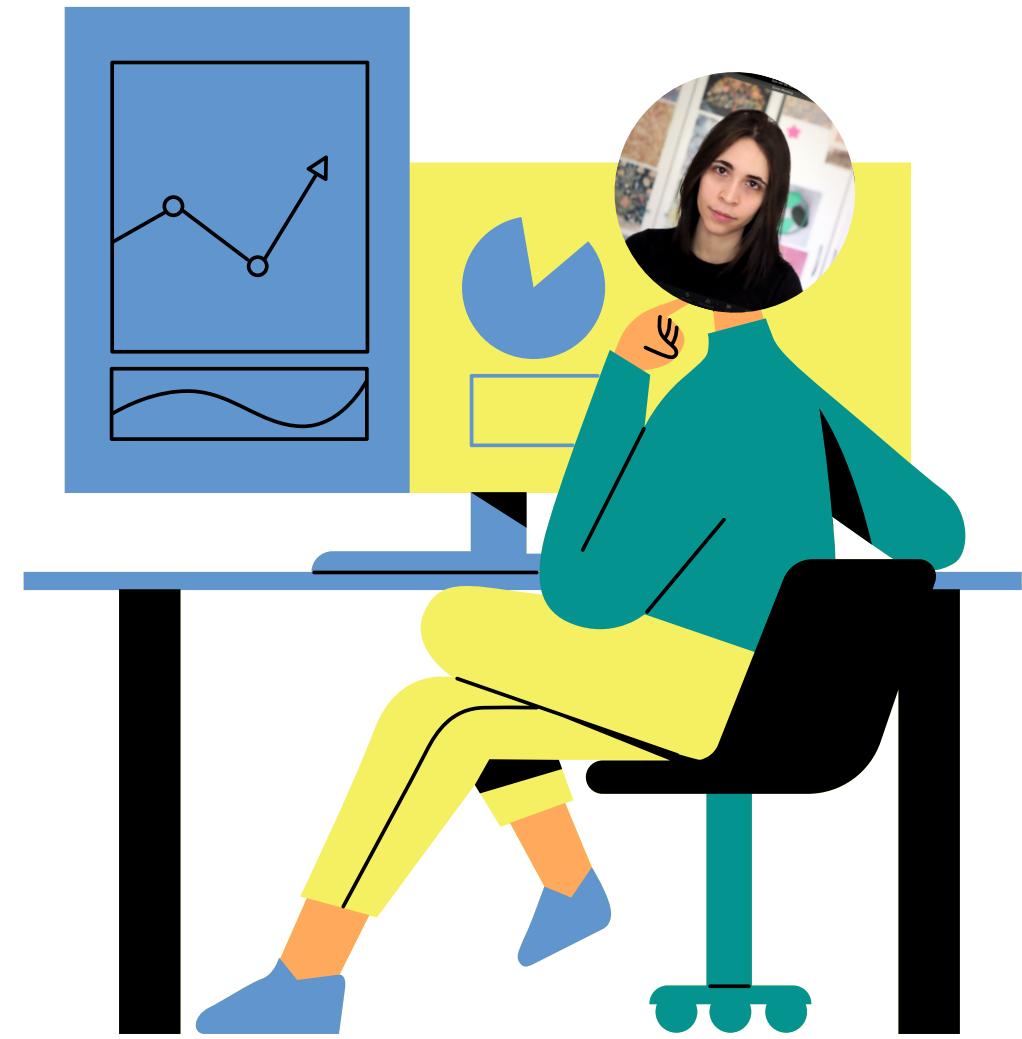
**Part 3:** OpenSearch dashboards

@aiven\_io

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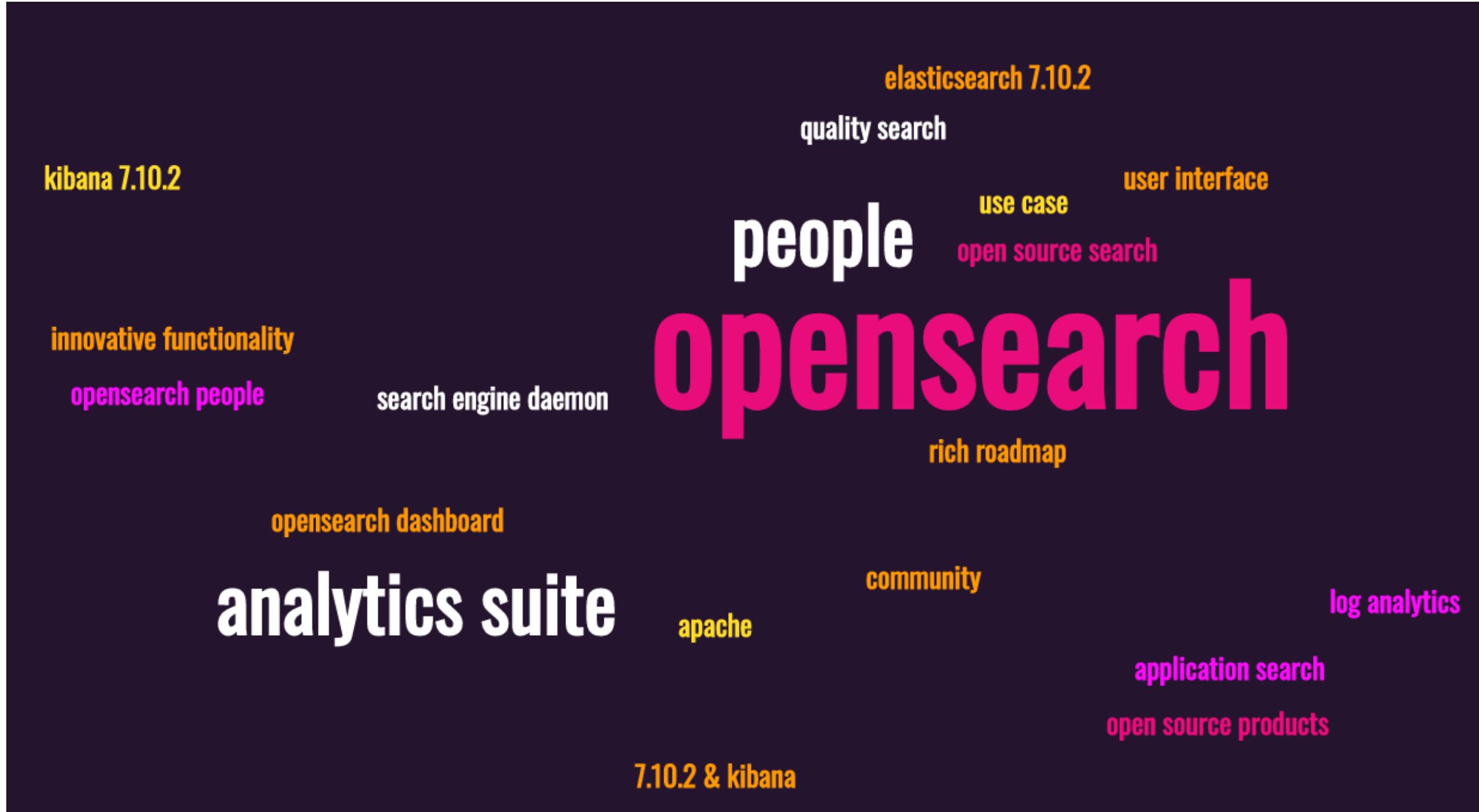
**"If you can not measure it,  
you can not improve it."**

William Thompson



@aiven\_io

@laysauchoa



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@laysauchoa

# Key features



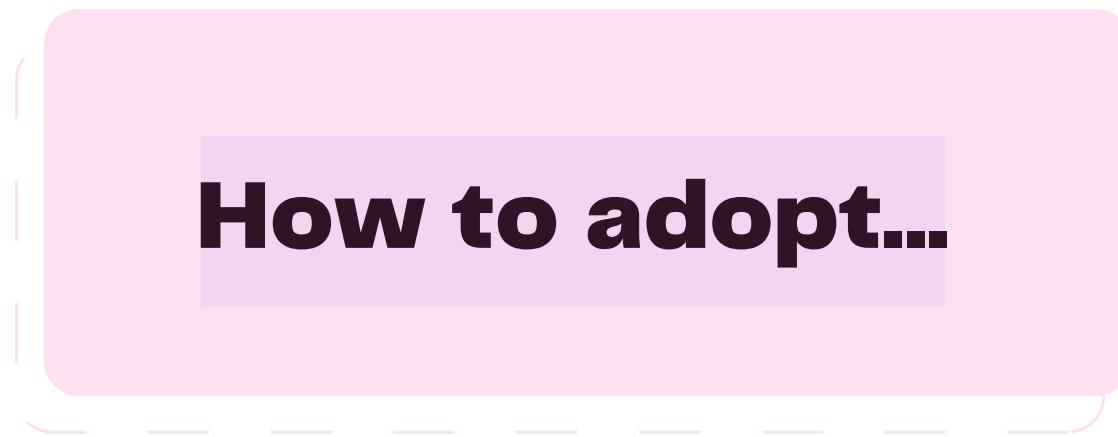
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**How to adopt...**

# Auto-completion



How to adopt a cat in germany

How to adopt a cat in munich

How to adopt a cat in sims 4

How to adopt a cat for free

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**Adopt animals**

# Highlighting matches

Adopt animals

## Reasons to adopt

When you **adopt dogs** and cats, you save a loving ...

## Adopt an Animal Today

Transform an animals life forever by **adopting an animal**

## Top 10 Reasons to Adopt from an Animal Shelter

List of main reasons that you should know to **adopt an animal**

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# Correcting typos

cute petds

## Correcting typos

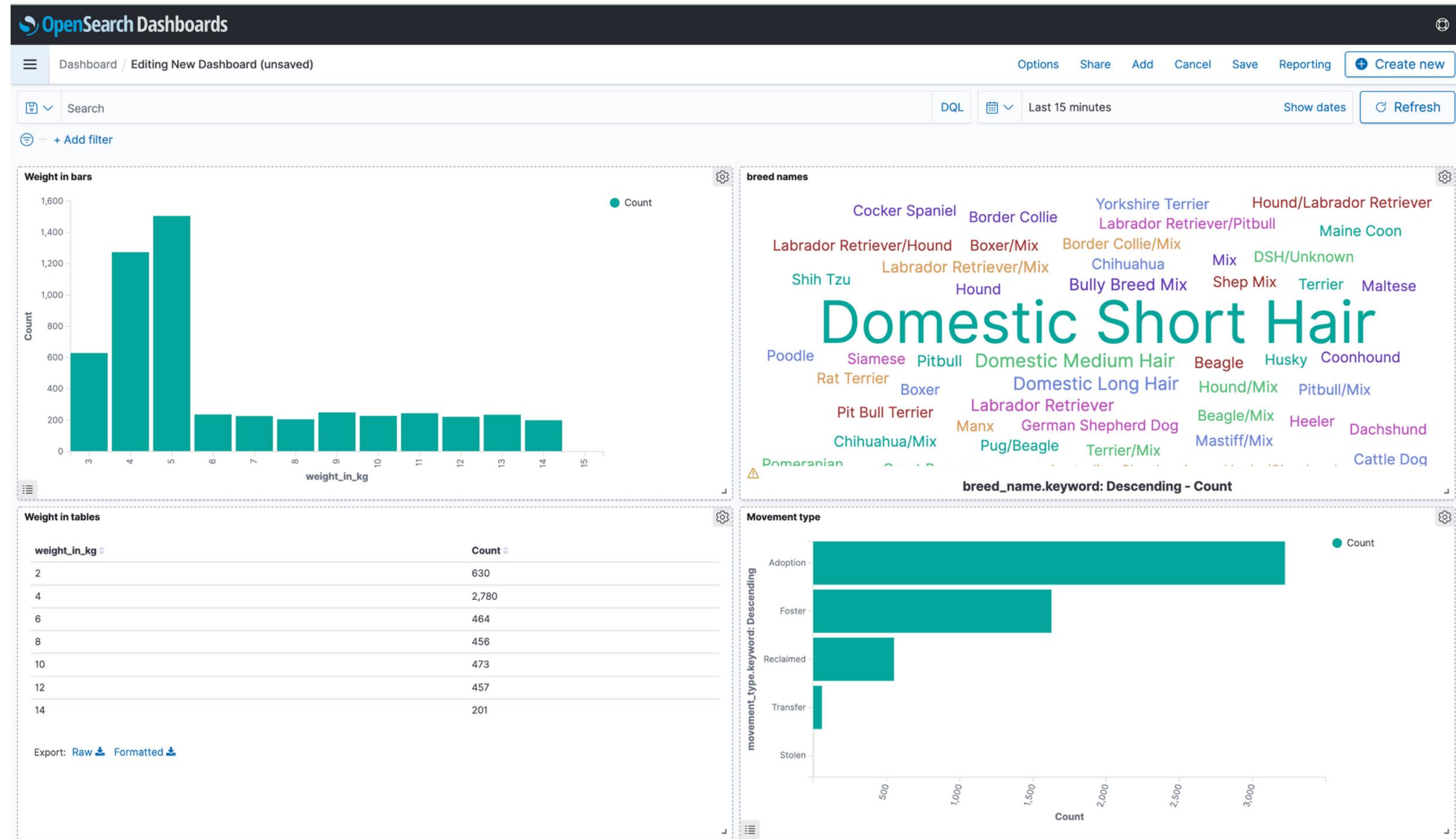


**cute petds**

No matches found for **cute petds**

Showing results for **cute pets** instead

# OpenSearch Dashboards



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# OpenSearch overview



# OpenSearch overview

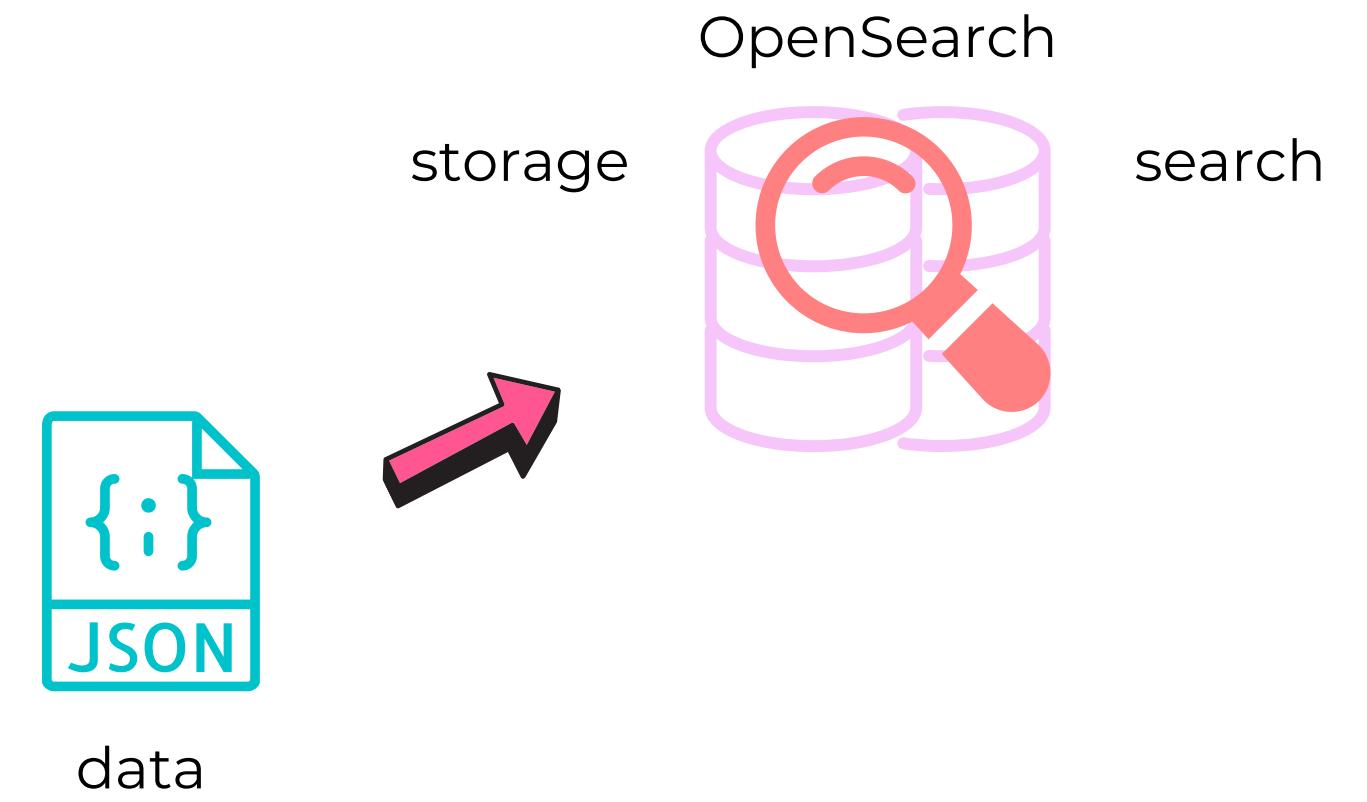


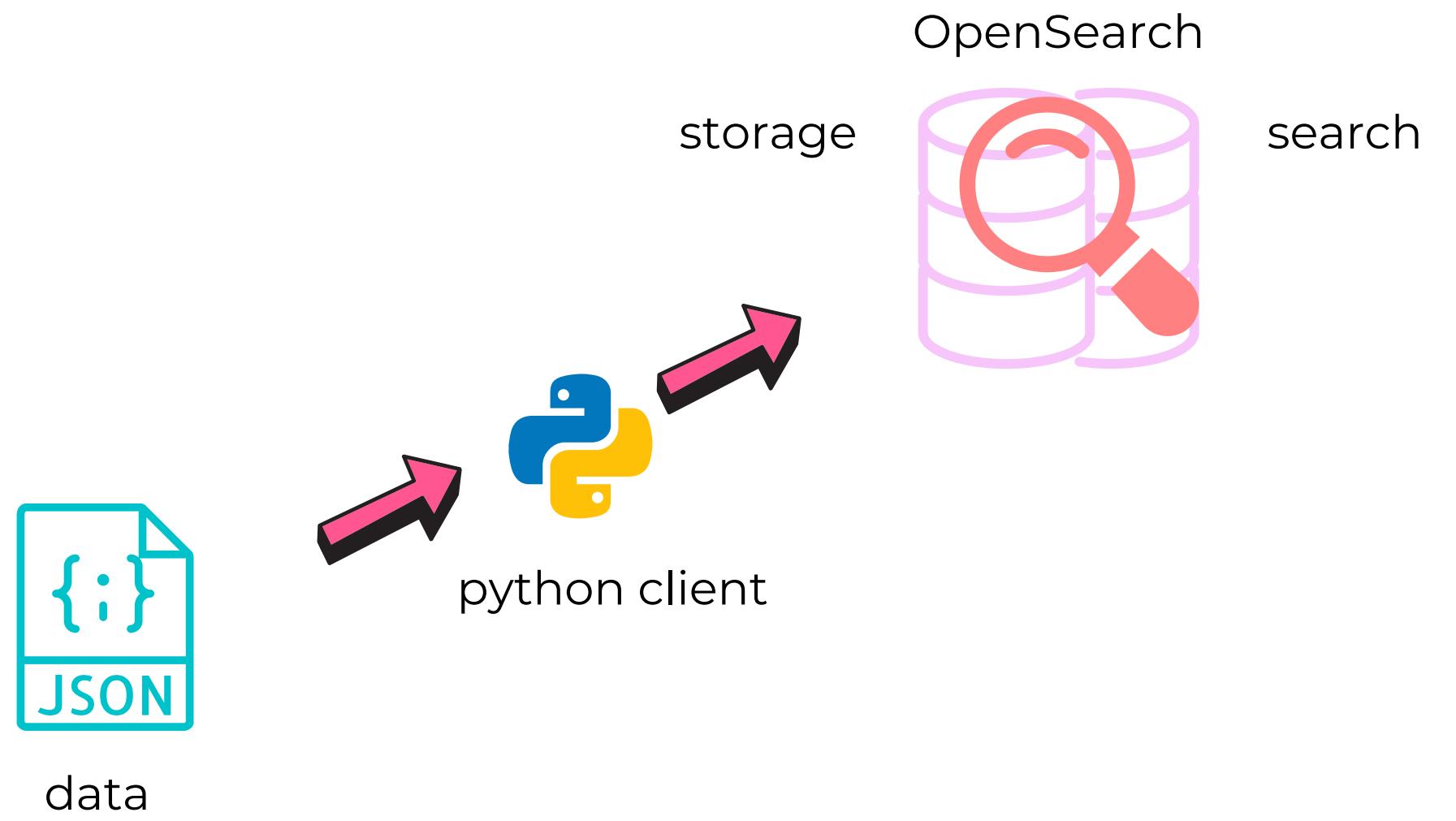
OpenSearch

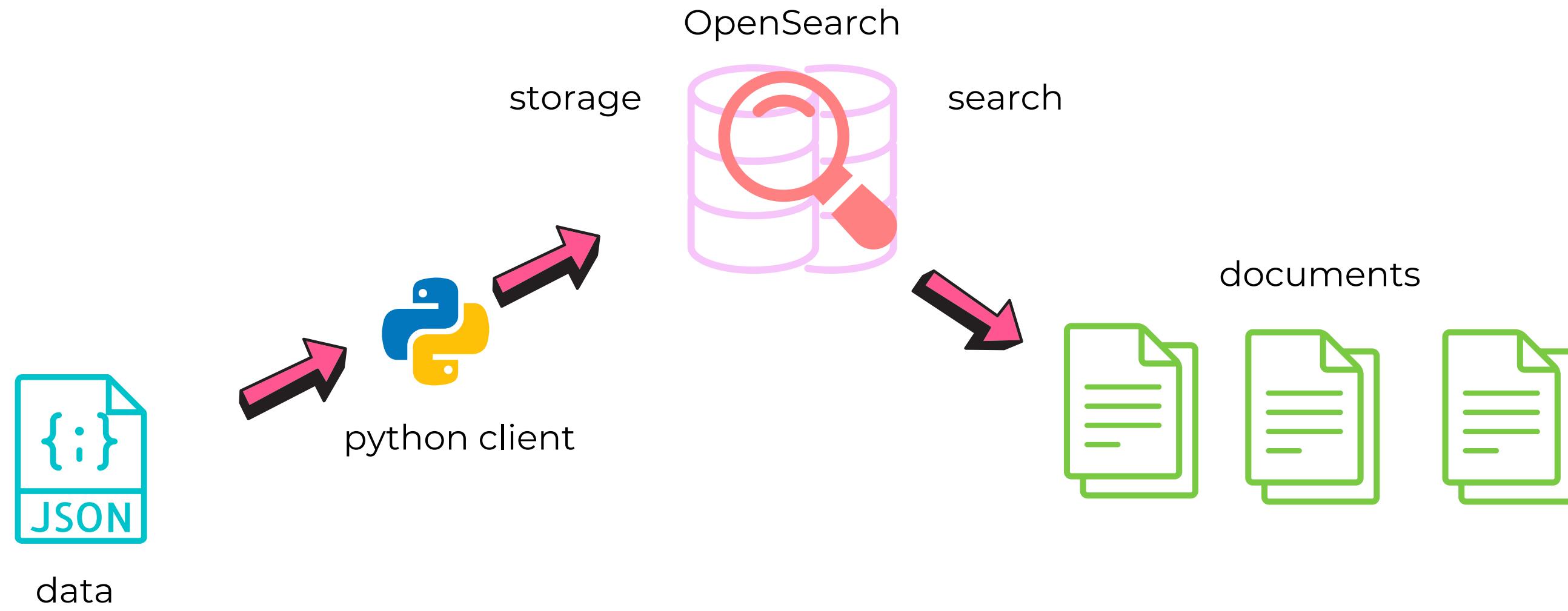
storage

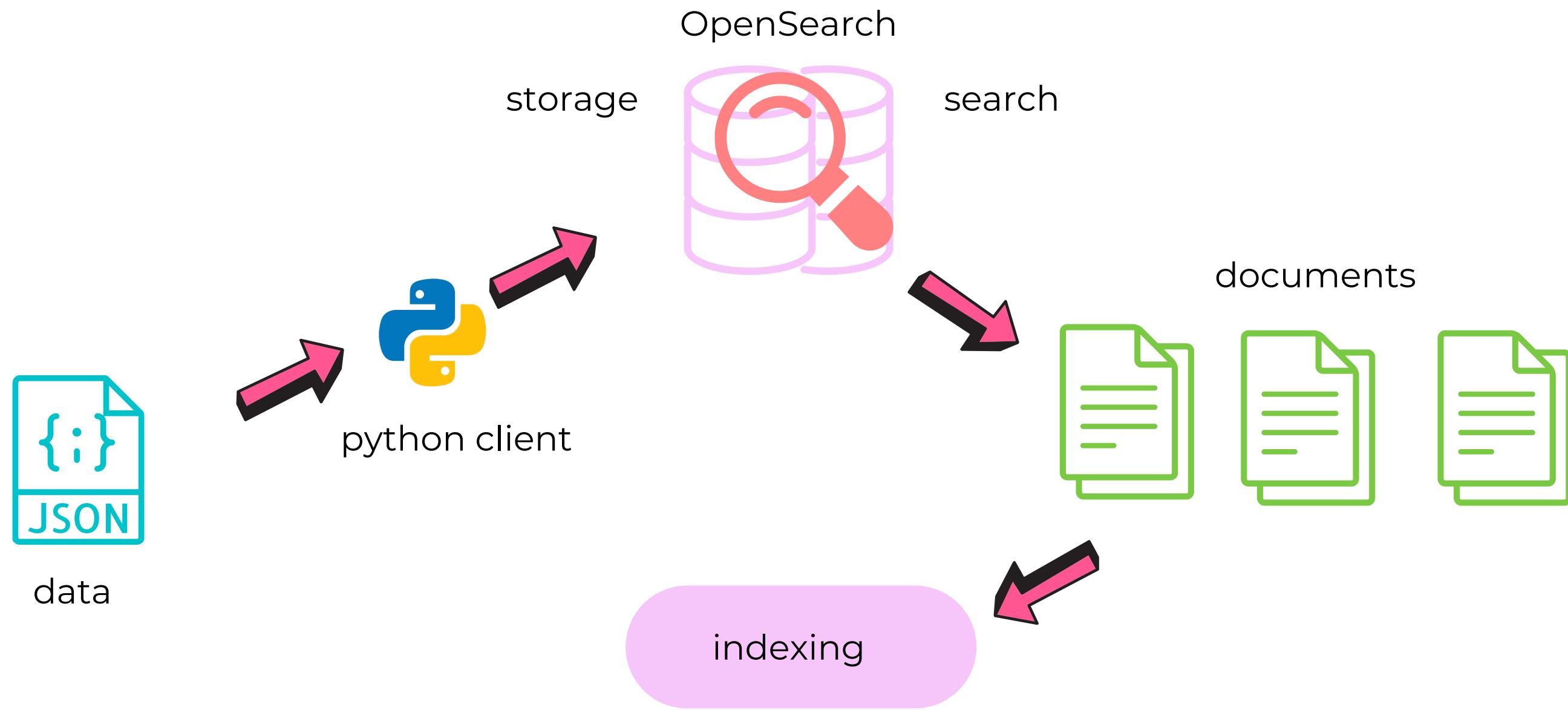
search





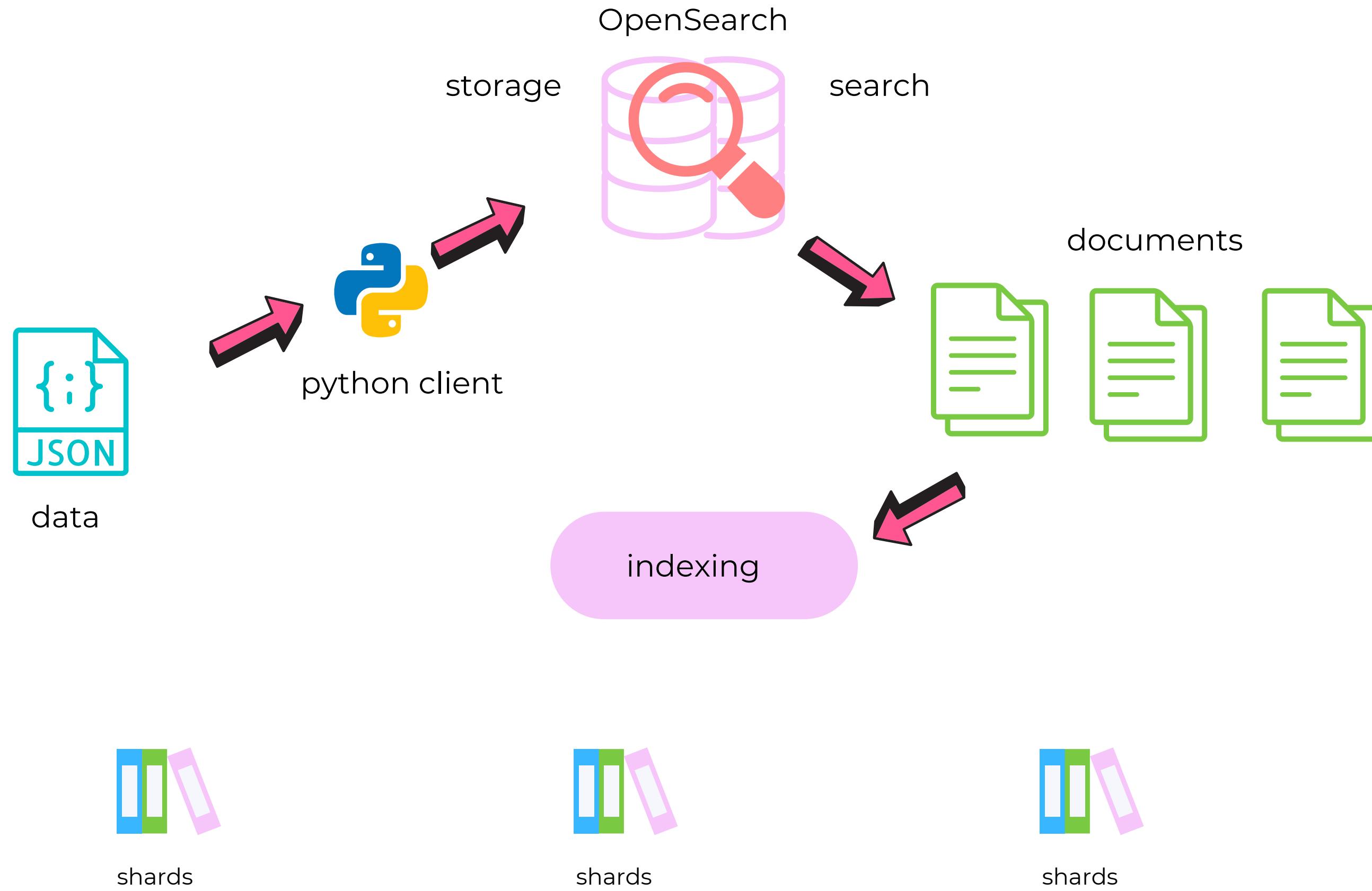






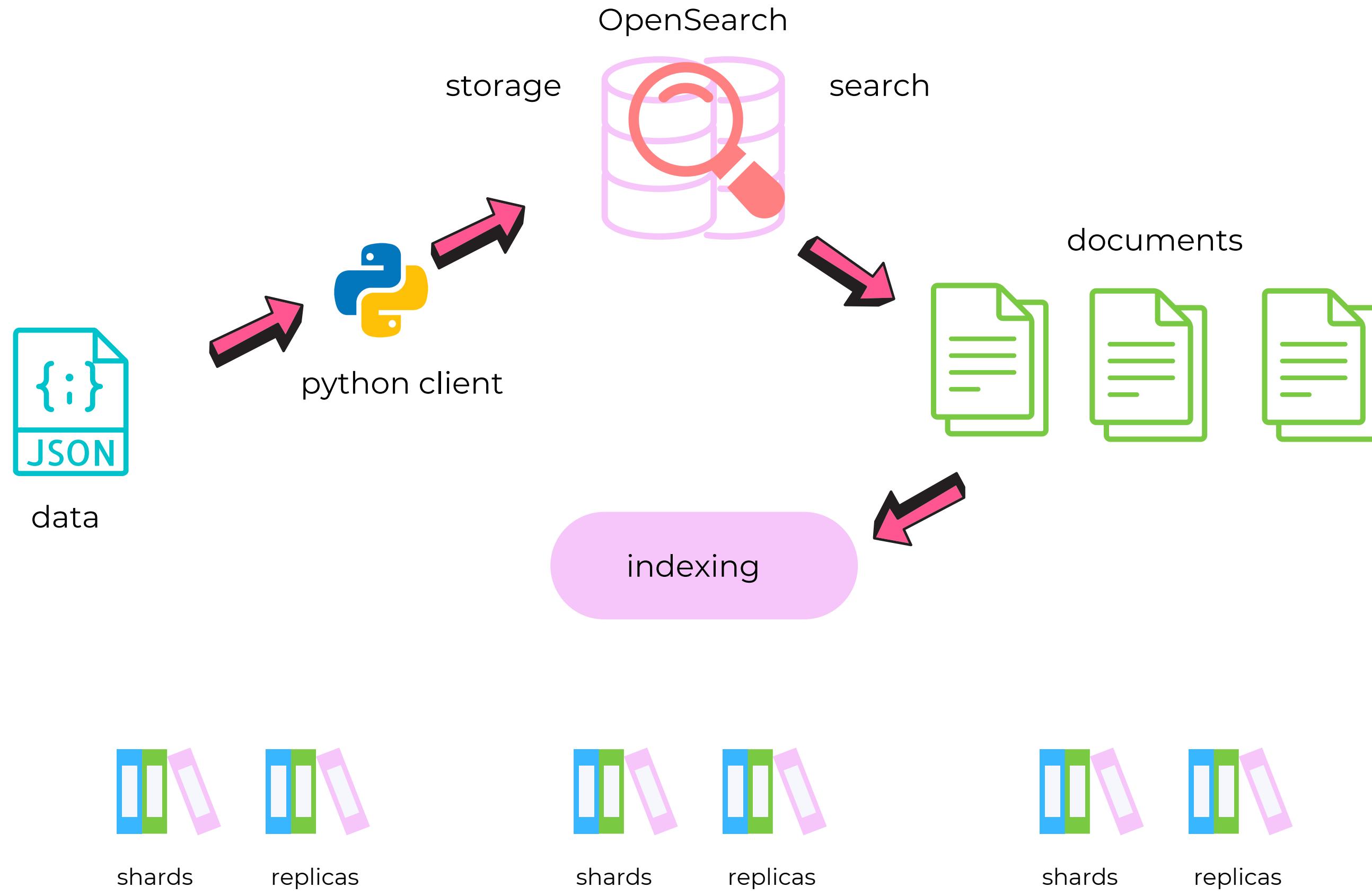
@aiven\_io

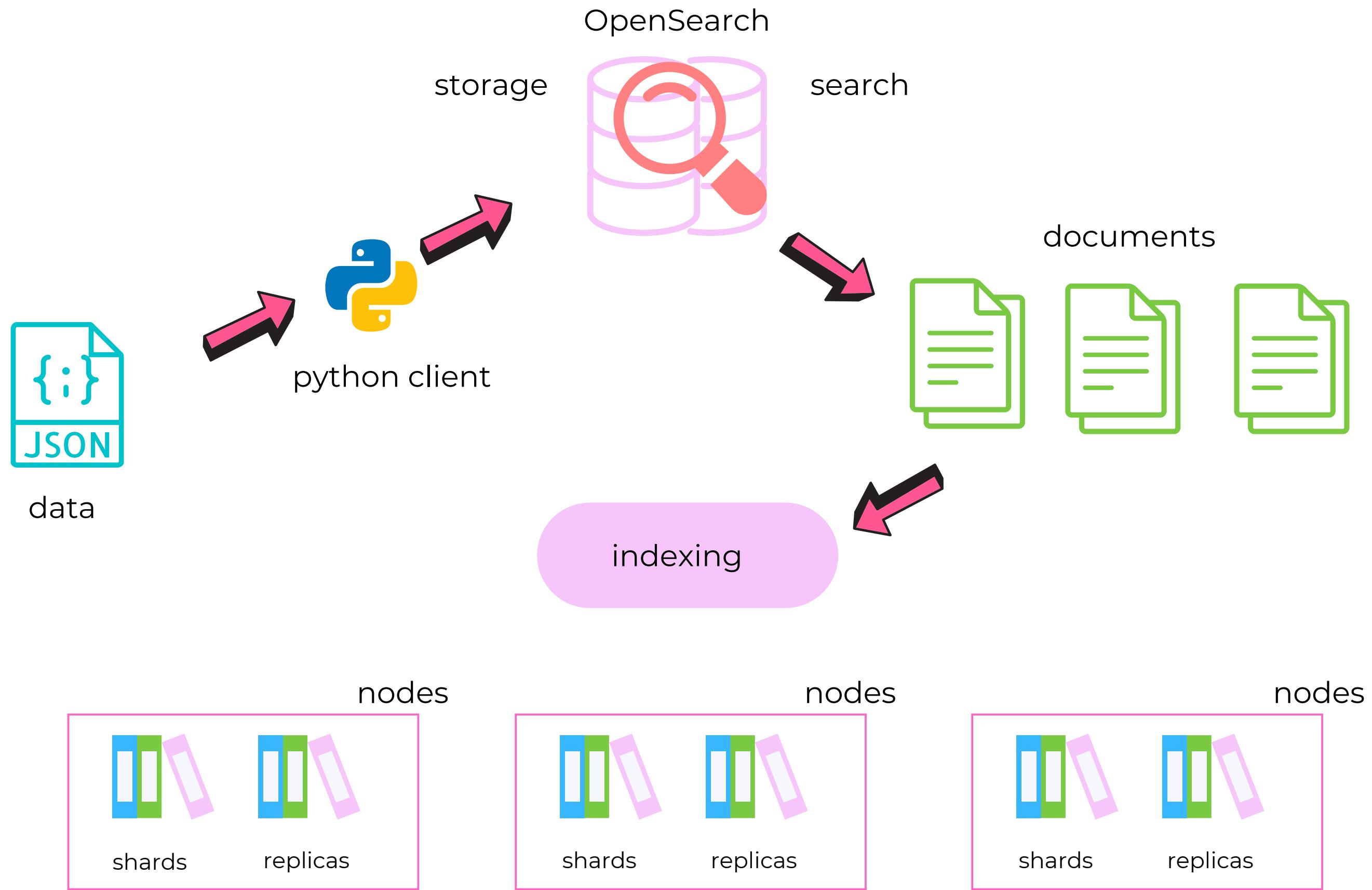
@laysauchoa



@aiven\_io

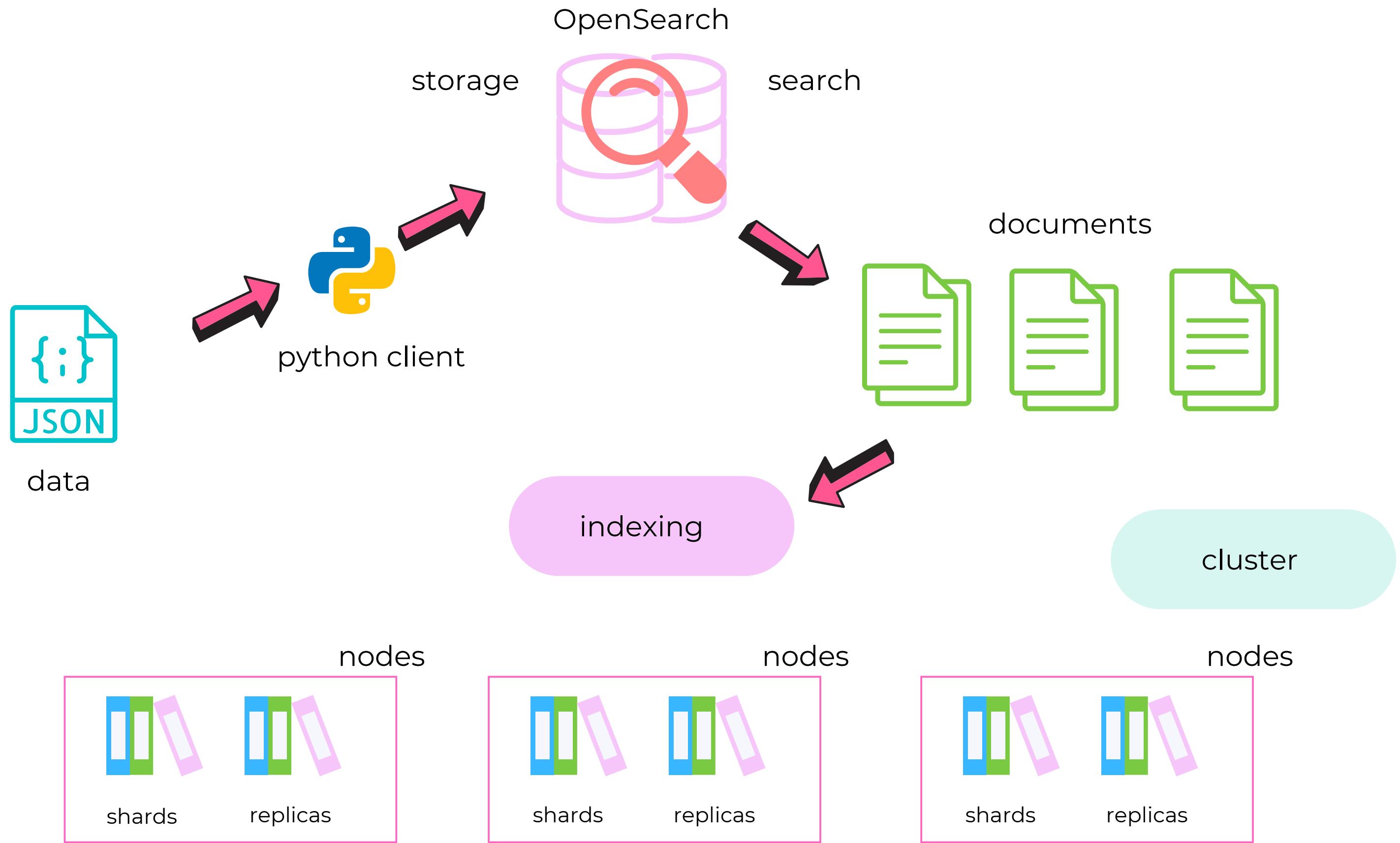
@laysauchoa





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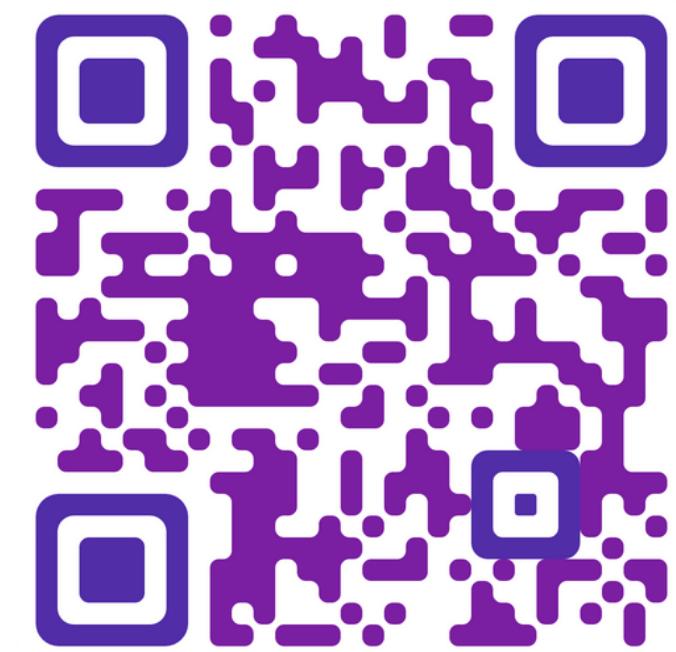
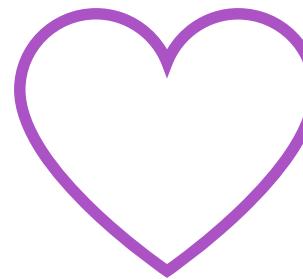
source:



FOSDEM 2022 - Search and  
aggregations made easy wit...

fosdem.org

# How to find our pet?!



- Python
- OpenSearch cluster
- And of course... Data

[laysauchoa/opensearch-python-demo](#)



1 Contributor    0 Issues    0 Stars    0 Forks

[laysauchoa/opensearch-python-demo](#)

Contribute to laysauchoa/opensearch-python-demo development by creating an account on GitHub.

[GitHub](#)

@laysauchoa

# Search Queries



@aiven\_io

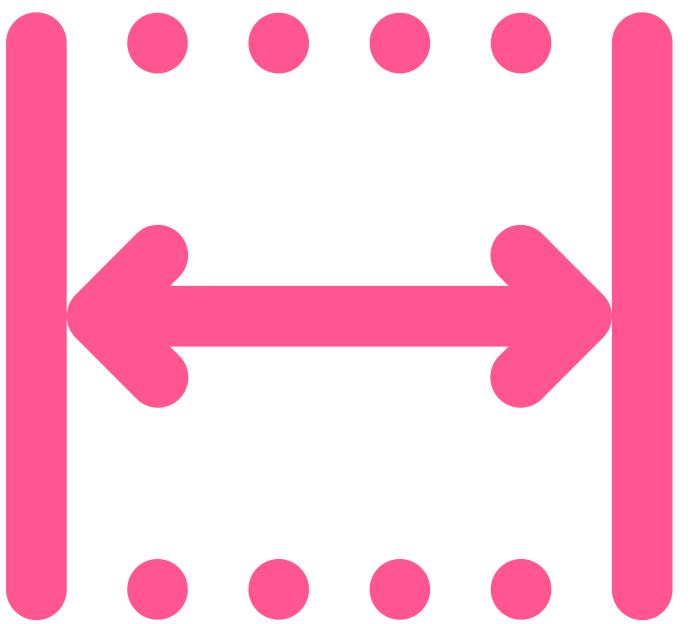
@laysauchoa

- Weight in Kg <10 kg
- Age ~5 years



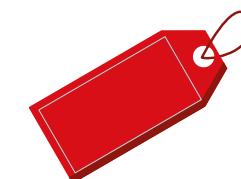
@aiven\_io  
@laysauchoa

# Search within a range



```
{  
  "query":{  
    "range":{  
      "field":{  
        "gte":gte,  
        "lte":lte  
      }  
    }  
  }  
}
```

Parameter	Behavior
gte	Greater than or equal to
gt	Greater than
lt	Less than
lte	Less than or equal to



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@laysauchoa

Use **match** to  
search

returned\_reason:

"Stray"

{

  "query": {

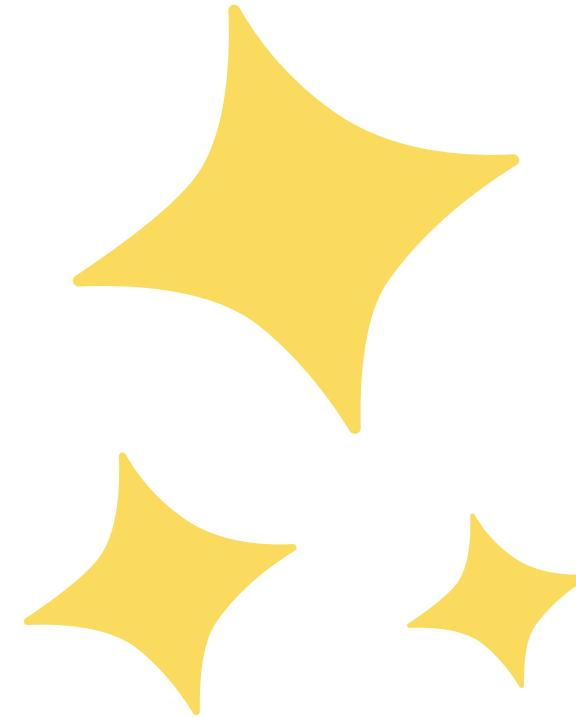
    "match": {

      field: term

    }

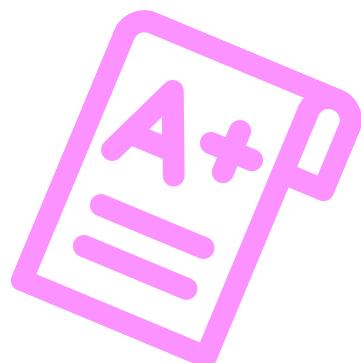
  }

}



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**Use multi match  
to search**

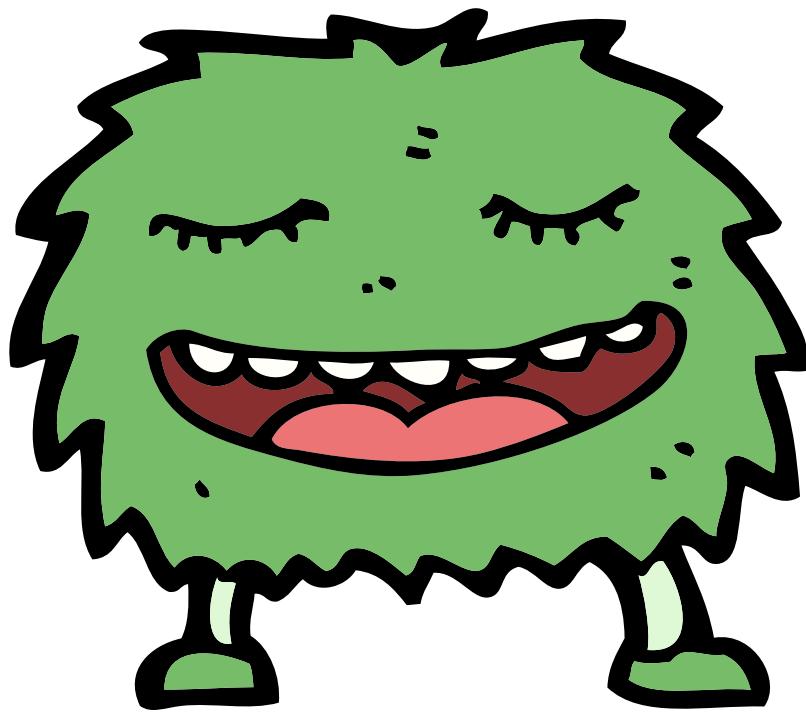


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```
{  
  "query": {  
    "multi_match": {  
      "query": term,  
      "fields": [field1, field2]  
    }  
  }  
}
```



# **Write fuzzy queries**

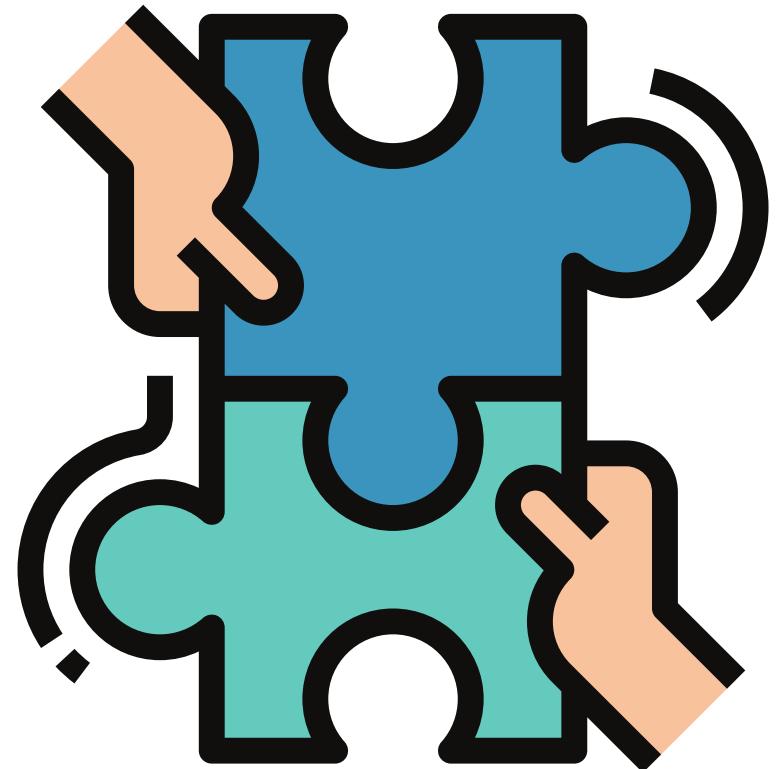


```
{  
  "query":{  
    "fuzzy":{  
      "field":{  
        "value": value,  
        "fuzziness": fuzziness  
      }  
    }  
  }  
}
```

## Examples:

- Change of a character: `post` → `lost`
- Removal of a character: `eggs` → `ggs`
- Insertion of a character: `edi` → `edit`
- Transposition of two adjacent characters: `act` → `cat`

# **Write boolean queries**



```
{  
  "query":{  
    "bool":{  
      "must":{  
        "match":{  
          "animal_name":"Betty"  
        }  
      },  
      "filter": [  
        {  
          "range":{  
            "birth_date":{  
              "gte":"2017-05",  
              "lte":"2020-05"  
            }  
          }  
        }  
      ]  
    }  
  }  
}
```



@aiven\_io  
@laysauchoa

# **OpenSearch**

# **Dashboards**

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# Questions

If you want to know anything more **OpenSearch** or share your ideas, **feel free to talk to me @laysauchoa or @aiven\_io**

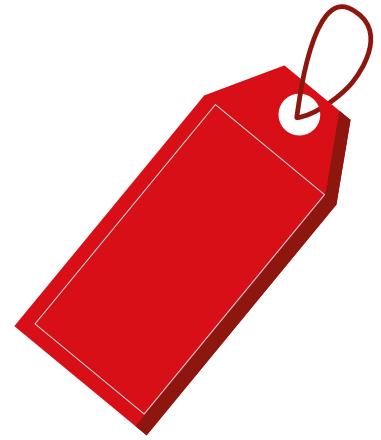
---



**Thank you!**

---

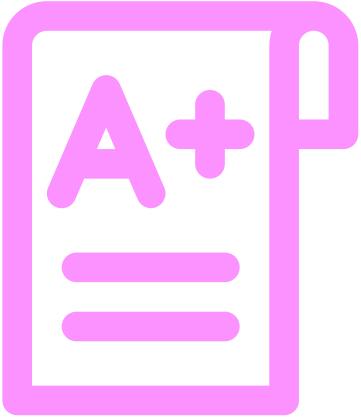
# Queries



## Term-level

**exact matches**

for numbers, dates or tags  
and don't need to sort the  
results by relevance.



## Full-text

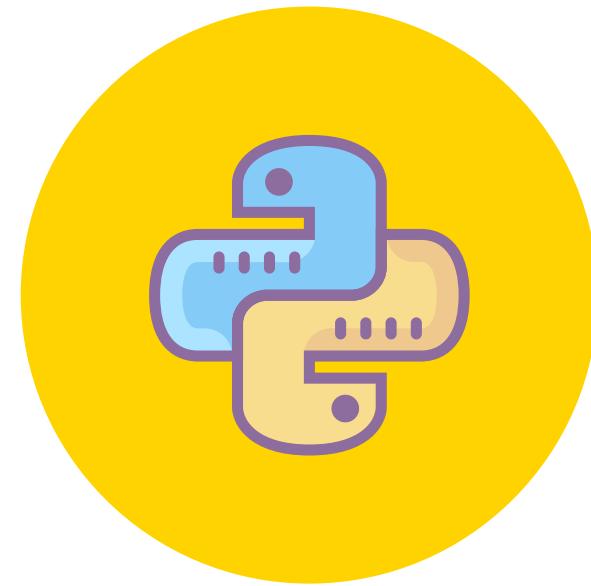
results sorted by  
relevance  
enable you to search  
analyzed text fields



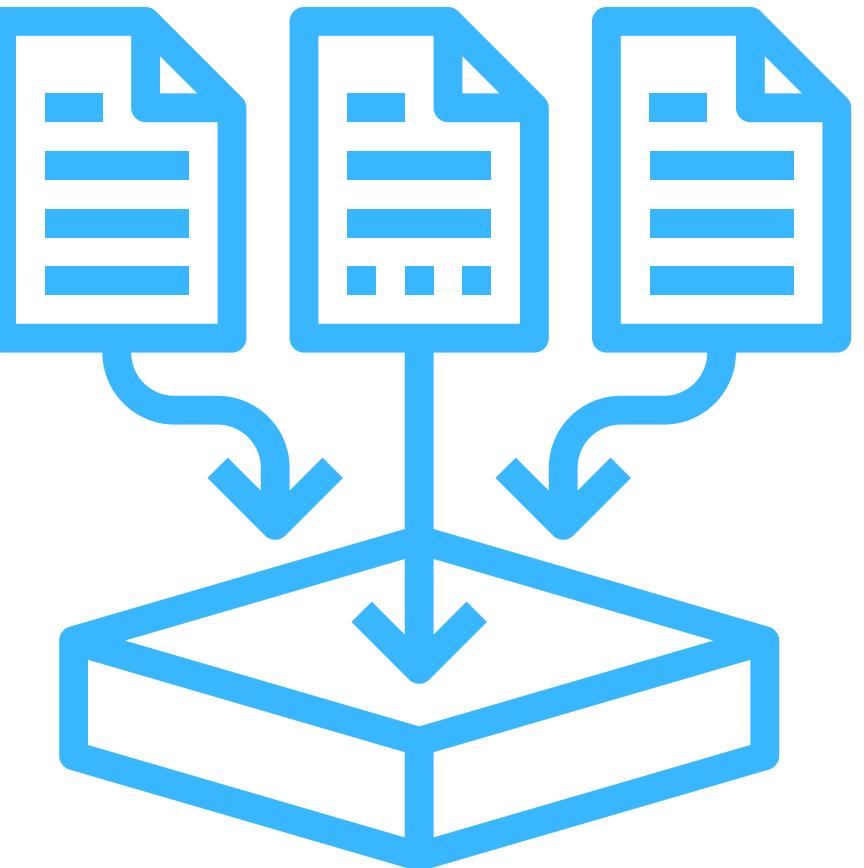
## Boolean

boolean  
combinations of other  
queries  
supports boolean clauses  
such as must, filter, should  
and must\_not.

# Create client



# Load Data



@aiven\_io

@laysauchoa

# Get Mapping



@aiven\_io  
@laysauchoa