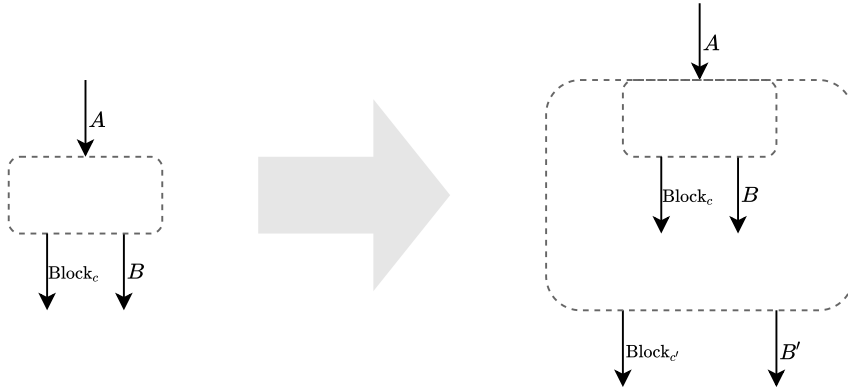# Queries

Queries extrend monadic transformations.

Queries: Example

List all departments.

```
department
```

Query Composition

$Q_1 . Q_2$

A

Block_c B

Q_1

A

Block_c B

$\text{Block}_{c'}$ B'

Q_2

A

Block_c B

$\text{Block}_{c'}$ B'

$\text{Block}_{c''}$ B''

Query Composition: Example

List the names of all departments.

`department.name`

Counting Example

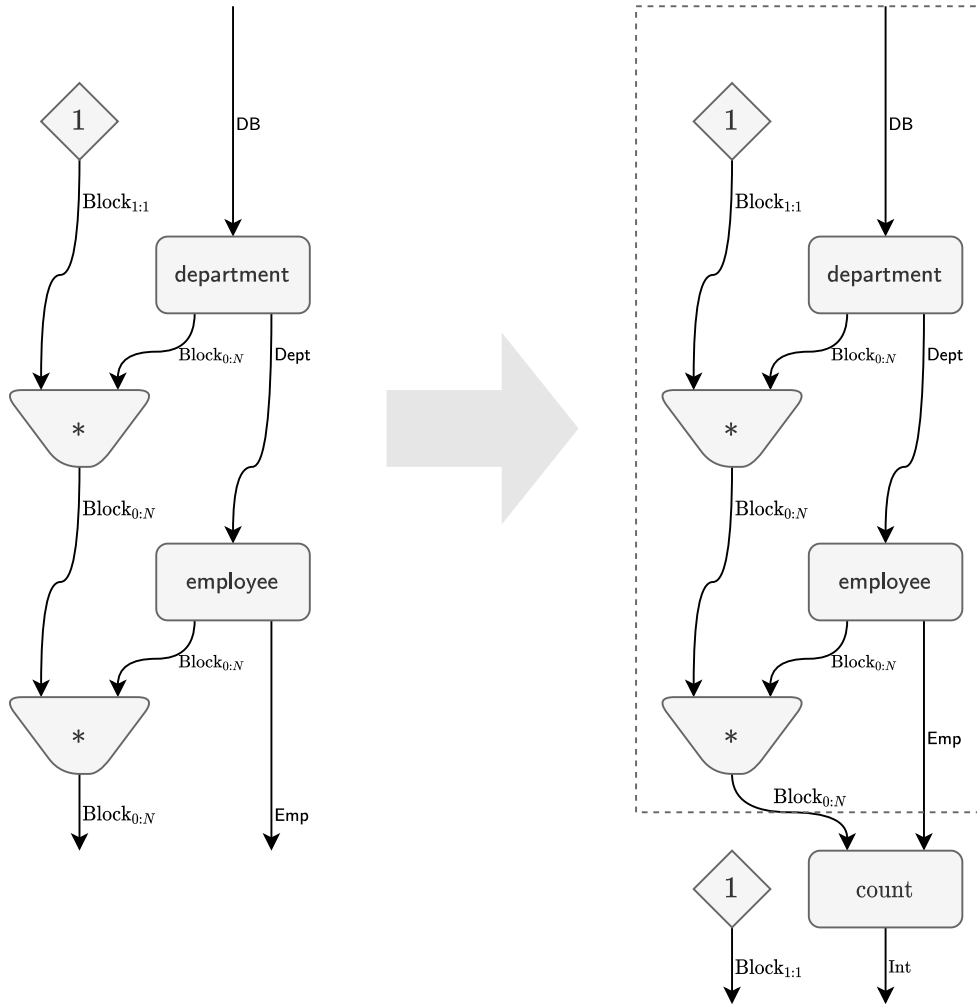*Show the number of departments.*

`count(department)`

Counting Challenge 1

*Show the number of employees
in each department.*

```
department.count(employee)
```

Counting Challenge 2

Show the total number of employees in all departments.

`count(department.employee)`