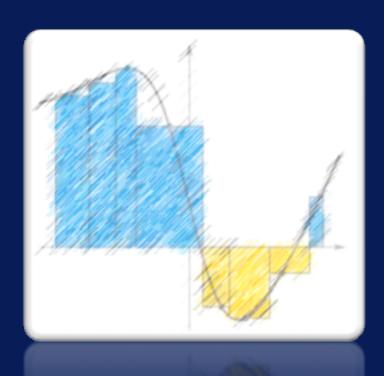
# Aggregations in Big Data Pipelines

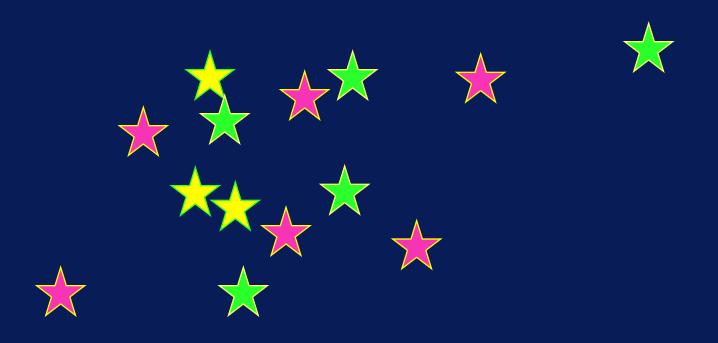


## After this video you will be able to...

- Compare and select the Aggregation operation that you require to solve your problem
- Explain how you can use Aggregations to compact your dataset and reduce volume (in many cases)

 Design complex operations in your pipeline using a series of Aggregations

#### What is Aggregation?



#### Symbol for any transformation



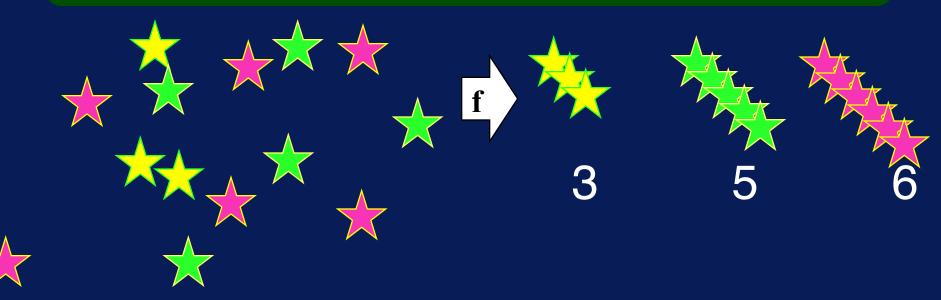
# Aggregation > f (all elements)



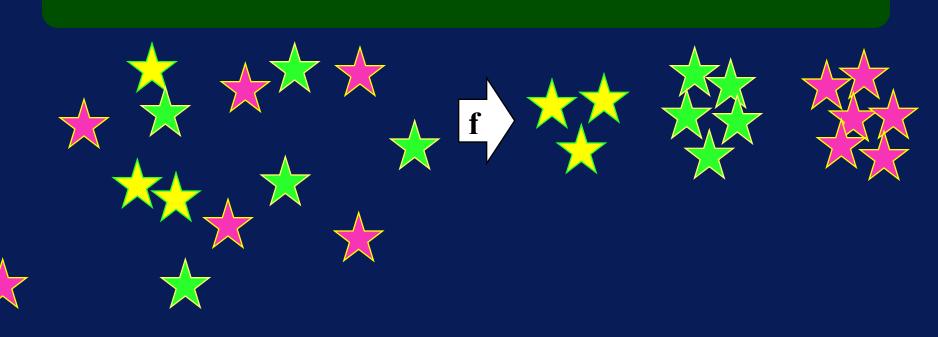
# Aggregation -> f (all elements)



## **GROUP BY**



#### AVERAGE # PER COLOR



#### OTHER TRANSFORMATIONS

MAX

MIN

STANDARD DEVIATION

### **Connecting Aggregations**



#### **BOOLEAN AGGREGATION**

AND

1011010011010110101101101101011101010



0

OR

10110100110101101101101101101011101010



1

SETS

STRINGS

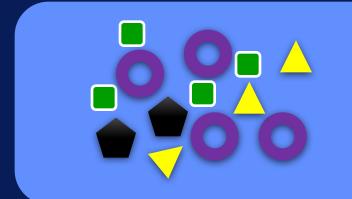
**UNION** 

CONCATENATION

INTERSECTION

DIFFERENCE

#### Aggregations → Organized & Compact Data





AGGREGATED OUTPUT

Variety & Volume

**Actionable Insights**