

Reviewing Group By and Pivot

Manipulating Granularity: Group By

Key Data

A	3
---	---

B	1
---	---

C	4
---	---

A	1
---	---

B	5
---	---

C	9
---	---

A	2
---	---

B	6
---	---

C	5
---	---

Manipulating Granularity: Group By

Key Data

A	3
B	1
C	4
A	1
B	5
C	9
A	2
B	6
C	5

A	3
A	1
A	2

Manipulating Granularity: Group By

Key Data

A	3
---	---

B	1
---	---

C	4
---	---

A	1
---	---

B	5
---	---

C	9
---	---

A	2
---	---

B	6
---	---

C	5
---	---

Split into
Groups →

A	3
---	---

A	1
---	---

A	2
---	---

B	1
---	---

B	5
---	---

B	6
---	---

C	4
---	---

C	9
---	---

C	5
---	---

Manipulating Granularity: Group By

Key Data

A	3
B	1
C	4
A	1
B	5
C	9
A	2
B	6
C	5

Split into
Groups

A	3
A	1
A	2
B	1
B	5
B	6
C	4
C	9
C	5

Aggregate
Function

A	6
---	---

Aggregate
Function

B	12
---	----

Aggregate
Function

C	18
---	----

Manipulating Granularity: Group By

Key Data

A	3
---	---

B	1
---	---

C	4
---	---

A	1
---	---

B	5
---	---

C	9
---	---

A	2
---	---

B	6
---	---

C	5
---	---

Split into
Groups

A	3
---	---

A	1
---	---

A	2
---	---

B	1
---	---

B	5
---	---

B	6
---	---

C	4
---	---

C	9
---	---

C	5
---	---

Aggregate
Function

A	6
---	---

Aggregate
Function

B	12
---	----

Aggregate
Function

C	18
---	----

Merge
Results

A	6
---	---

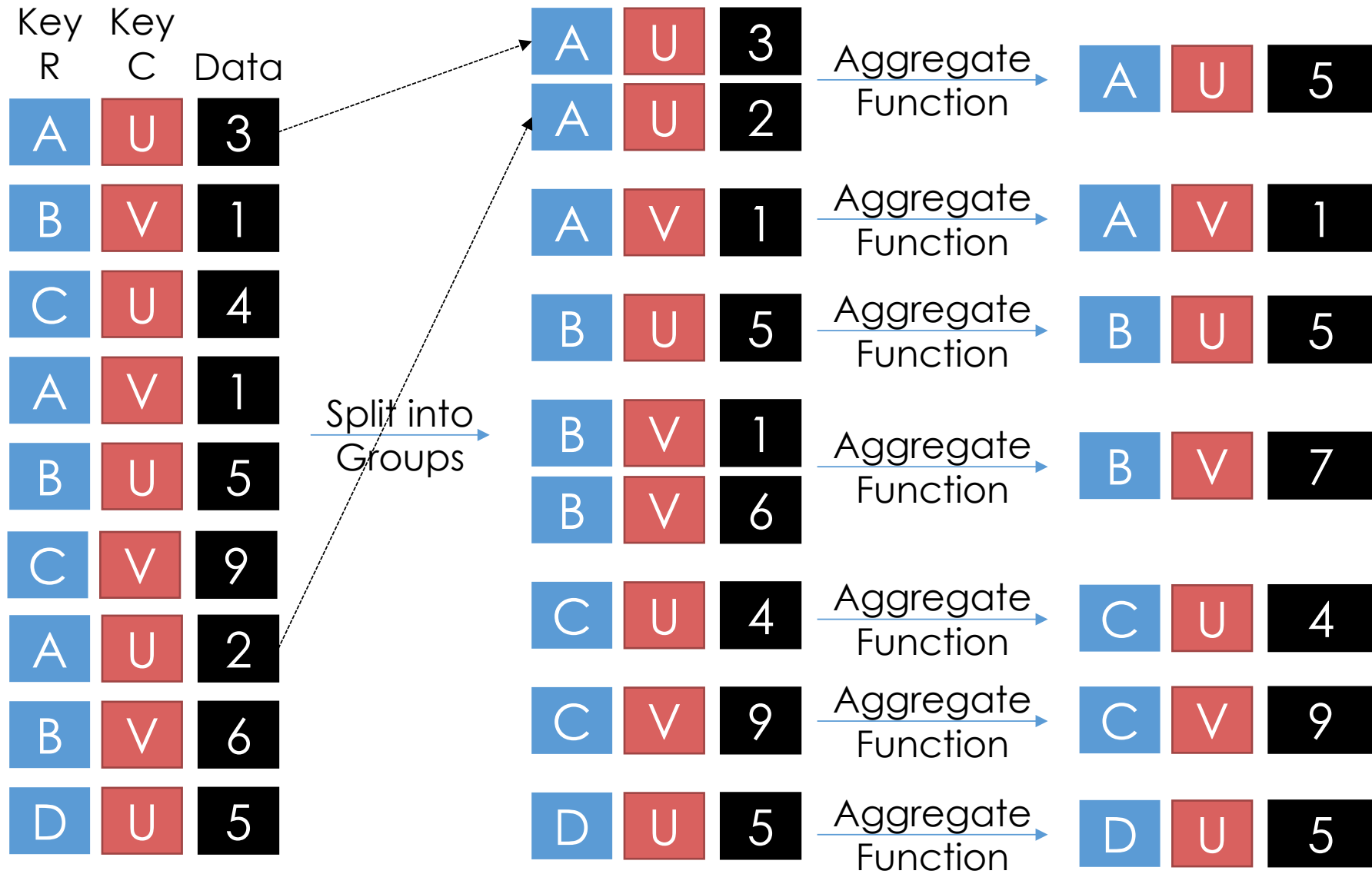
B	12
---	----

C	18
---	----

Manipulating Granularity: Pivot

Key R	Key C	Data
A	U	3
B	V	1
C	U	4
A	V	1
B	U	5
C	V	9
A	U	2
B	V	6
D	U	5

Manipulating Granularity: Pivot



Manipulating Granularity: Pivot

ate
on →

A	U	5
---	---	---

ate
on →

A	V	1
---	---	---

ate
on →

B	U	5
---	---	---

ate
on →

B	V	7
---	---	---

ate
on →

C	U	4
---	---	---

ate
on →

C	V	9
---	---	---

ate
on →

D	U	5
---	---	---

Manipulating Granularity: Pivot

Update
on →

A	U	5
---	---	---

Update
on →

A	V	1
---	---	---

Update
on →

B	U	5
---	---	---

Update
on →

B	V	7
---	---	---

Update
on →

C	U	4
---	---	---

Update
on →

C	V	9
---	---	---

Update
on →

D	U	5
---	---	---

	U	V
A	5	1
B	5	7
C	4	9
D	5	

Need to address missing values