

Input

Map

Reduce

Output

Key

Value

1

A B C D

2

A C A

3

B D D E

Key

Value

A

1

B

1

C

1

D

1

A

1

C

1

A

1

B

1

D

1

D

1

E

1

Key

Value

A

1+1+1

B

1+1

C

1+1

D

1+1+1

E

1

Key

Value

A

3

B

2

C

2

D

3

E

1