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- [????? \(?????\)](#)

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[?????.png](#)

???

. ???

```
[{
  x: 'Oceania',
  low: 1,
  q1: 9,
  median: 16,
  q3: 22,
  high: 24
}, {
  x: 'East Europe',
  low: 1,
  q1: 5,
  median: 8,
  q3: 12,
  high: 16
}, {
  x: 'Australia',
  low: 1,
  q1: 8,
  median: 12,
  q3: 19,
  high: 26
}, {
```

```
x: 'South America',  
low: 2,  
q1: 8,  
median: 12,  
q3: 21,  
high: 28  
, {  
  x: 'North Africa',  
  low: 1,  
  q1: 8,  
  median: 14,  
  q3: 18,  
  high: 24  
, {  
  x: 'North America',  
  low: 3,  
  q1: 10,  
  median: 17,  
  q3: 28,  
  high: 30  
, {  
  x: 'West Europe',  
  low: 1,  
  q1: 7,  
  median: 10,  
  q3: 17,  
  high: 22  
, {  
  x: 'West Africa',  
  low: 1,  
  q1: 6,  
  median: 8,  
  q3: 13,  
  high: 16  
}]
```

• ??

40,40,80,60

• ?????? Transform

????? map ?

??	???
??	????
????	<div><pre>function callback(obj) { obj.range = [obj.low, obj.q1, obj.median, obj.q3, obj.high]; return obj;} </pre></div>

• ? Geom

K??? schema ?

??	???
??	x*range
??	K??
??	box
?? - ??	#545454

?????

???

?????.png

???

• ???

```
[{
  low: 1,
  q1: 9,
  median: 16,
  q3: 22,
  high: 24
}]
```

• ??

40, 40, 60

• ?????? Transform

????? map ?

??	???
??	????

????	<pre>function callback(obj) { obj.range = [obj.low, obj.q1, obj.median, obj.q3, obj.high]; return obj; }</pre>
------	--

• ? Geom

K??? schema ?

??	???
??	range*1
??	K??
??	box
?? - ??	#545454

??????

???

???????.png

???

. ???

```
[{
  x: 'Oceania',
  low: 1,
  q1: 9,
  median: 16,
  q3: 22,
  high: 24
}, {
  x: 'East Europe',
  low: 1,
  q1: 5,
  median: 8,
  q3: 12,
  high: 16
}, {
  x: 'Australia',
  low: 1,
  q1: 8,
  median: 12,
  q3: 19,
  high: 26
}, {
  x: 'South America',
  low: 2,
  q1: 8,
```

```
    median: 12,  
    q3: 21,  
    high: 28  
  }, {  
    x: 'North Africa',  
    low: 1,  
    q1: 8,  
    median: 14,  
    q3: 18,  
    high: 24  
  }, {  
    x: 'North America',  
    low: 3,  
    q1: 10,  
    median: 17,  
    q3: 28,  
    high: 30  
  }, {  
    x: 'West Europe',  
    low: 1,  
    q1: 7,  
    median: 10,  
    q3: 17,  
    high: 22  
  }, {  
    x: 'West Africa',  
    low: 1,  
    q1: 6,  
    median: 8,  
    q3: 13,  
    high: 16  
  }  
}]
```

• ??

50, 50, 100

• ?????? Transform

????map?

??	???
??	????
????	<div>function callback(obj) { obj.range = [obj.low, obj.q1, obj.median, obj.q3, obj.high]; return obj;}</div>

• ??? Scale

range? Y? ?

??	???
??	range
??	linear
??????	??
???	35

• ? Geom

K??? schema ?

??	???
??	x*range
??	K??
????	x
??	box
??	60

• ?? Legend

??	???
??	??
??	x
??	?
??	??
????	??

• ??? Coord

??	???
??	????
?????	0.4

????? (?????)

???

?????.png

???

. ???

```
[{
  x: '  A',
  low: 20000,
  q1: 26000,
  median: 27000,
  q3: 32000,
  high: 38000,
  outliers: [50000, 52000]
}, {
  x: '  B',
  low: 40000,
  q1: 49000,
  median: 62000,
  q3: 73000,
  high: 88000,
  outliers: [32000, 29000, 106000]
}, {
  x: '  C',
  low: 52000,
  q1: 59000,
  median: 65000,
  q3: 74000,
  high: 83000,
  outliers: [91000]
```

```
}, {  
  x: 'D',  
  low: 58000,  
  q1: 96000,  
  median: 130000,  
  q3: 170000,  
  high: 200000,  
  outliers: [42000, 210000, 215000]  
}, {  
  x: 'E',  
  low: 24000,  
  q1: 28000,  
  median: 32000,  
  q3: 38000,  
  high: 42000,  
  outliers: [48000]  
}, {  
  x: 'F',  
  low: 47000,  
  q1: 56000,  
  median: 69000,  
  q3: 85000,  
  high: 100000,  
  outliers: [110000, 115000, 32000]  
}, {  
  x: 'G',  
  low: 64000,  
  q1: 74000,  
  median: 83000,  
  q3: 93000,  
  high: 100000,  
  outliers: [110000]  
}, {  
  x: 'H',  
  low: 67000,  
  q1: 72000,  
  median: 84000,  
  q3: 95000,  
  high: 110000,  
  outliers: [57000, 54000]}
```

```
}]
```

• ??

```
40, 40, 60, 60
```

• ?????? Transform

????? map ?

??	???
??	????
????	<pre>function callback(obj) { obj.range = [obj.low, obj.q1, obj.median, obj.q3, obj.high]; return obj;} </pre>

• ??? Scale

range? Y? ?

??	???
??	range
??	linear
??????	??
???	0
???	250000

outliers? Y? ?

??	???
??	outliers
??	linear

??????	??
???	0
???	250000

• ??? Axis

outliers? Y? ?

??	???
??	??
??	outliers

• ? Geom

K??? schema ?

??	???
??	x*range
??	K??
??	box

??? point ?

??	???
??	x*outliers
??	??
??	circle
??	3