df |> **group_by(cat1)** |> **mutate(y = x - min(x))**

cat1	cat2	x
a	j	1
a	j	2
a	k	3
b	j	4
b	k	5
b	k	6
c	j	7
c	j	8
c	k	9

cat1	cat2	x
a	j	1
a	j	2
a	k	3
b	j	4
b	k	5
b	k	6
c	j	7
c	j	8
c	k	9

cat1	cat2	x	y
a	j	1	0
a	j	2	1
a	k	3	2
b	j	4	0
b	k	5	1
b	k	6	2
c	j	7	0
c	j	8	1
c	k	9	2

```
df |>
  group_by(cat1) |>
  mutate(
    y = x - min(x)
  )
```