

# Agenda :

- 1) use Memo
- 2) use Callback
- 3) redux
- 4) use Reducers

$$\begin{cases} 13 \times 13 = 169 \\ 15 \times 15 = 225 \end{cases}$$

optimization

$$\begin{aligned} &13 \times 13 = 169 \\ &15 - 225 = 169 \\ &100 = 169 \\ &\downarrow \\ &\text{if } n=1 \\ &\text{do} \\ &\text{calculate} \\ &(99 \rightarrow) \end{aligned}$$

$$\begin{aligned} 5! &\rightarrow 5 \times 4! \\ &= 120 \\ &5 \times 4 \times 3 \times 2 \times 1 \rightarrow 1 \\ &120 \end{aligned}$$

$$4! = 4 \times 3 \times 2 \times 1 \rightarrow 1$$

$$3! = 3 \times 2 \times 1 = 2 \times 1$$

$$10! = 10 \times 9 \times 8 \times 7 \times 6 \times 5! \rightarrow \text{value}$$

$$\begin{aligned} &\text{mul} \left( \begin{matrix} n2 & n2 \\ 13 & 13 \end{matrix} \right) \rightarrow 169 \\ &\text{mul} (13, 13) \end{aligned}$$

$$\text{prev} = \text{cur}$$

X cache

$$\text{prev} \neq \text{cur}$$

calling fn, store cache its value

king

slaves

$$5! = 5 \times 4! \rightarrow \text{slave}$$

$$4! = 4 \times 3!$$

$$3! = 3 \times 2!$$

$$2! = 2 \times 1!$$

$$n=0 \Rightarrow 1$$

$$0! = 1$$