

```
const len = (s: string): number  $\Rightarrow$  s.length  
const isZero = (n: number): boolean  $\Rightarrow$  n  $\equiv$  0
```

```
function pipe<A, B, C>(  
  f1: (x: A)  $\Rightarrow$  B,  
  f2: (x: B)  $\Rightarrow$  C  
) {  
  return (arg: A)  $\Rightarrow$  f2(f1(arg))  
}
```

```
const isEmpty = pipe(len, isZero)  
const res = isEmpty('hello')
```

```
function fuji<TS extends RuleType, A, B = A>(r1: Rule<TS, A, B>):  
Fuji<TS, B>  
  
function fuji<TS extends RuleType, A, B = A, C = B>(  
  r1: Rule<TS, A, B>,  
  r2: Rule<TS, B, C>  
) : Fuji<TS, C>  
  
function fuji<TS extends RuleType, A, B = A, C = B, D = C>(  
  r1: Rule<TS, A, B>,  
  r2: Rule<TS, B, C>,  
  r3: Rule<TS, C, D>  
) : Fuji<TS, D>  
  
function fuji<TS extends RuleType, A, B = A, C = B, D = C, E = D>(  
  r1: Rule<TS, A, B>,  
  r2: Rule<TS, B, C>,  
  r3: Rule<TS, C, D>,  
  r4: Rule<TS, D, E>  
) : Fuji<TS, E>  
  
function fuji<TS extends RuleType, A, B = A, C = B, D = C, E = D, F =  
E>(  
  r1: Rule<TS, A, B>,  
  r2: Rule<TS, B, C>,  
  r3: Rule<TS, C, D>,  
  r4: Rule<TS, D, E>,  
  r5: Rule<TS, E, F>  
) : Fuji<TS, F>
```