

# Relational Programming

**miniKanren**

```
(run* (q)  
  (appendo '(1 2 3) '(4 5 6) q))
```

```
(run* (q)  
  (appendo '(1 2 3) '(4 5 6) q))
```

```
> '(1 2 3 4 5 6)
```

```
(run* (q)  
  (appendo '(1 2 3) q '(1 2 3 4 5 6)))
```

```
(run* (q)  
  (appendo '(1 2 3) q '(1 2 3 4 5 6)))
```

```
> '(4 5 6)
```

```
(run* (q)
  (fresh [x y]
    (appendo x y '(1 2 3 4 5 6))
    (== q `(,x . ,y)))))
```

```
(run* (q)
  (fresh [x y]
    (appendo x y '(1 2 3 4 5 6))
    (== q `(,x . ,y)))))
```

```
> (( ) 1 2 3 4 5 6) ((1 2 3 4) 5 6)
   ((1) 2 3 4 5 6)  ((1 2 3 4 5) 6)
   ((1 2) 3 4 5 6)  ((1 2 3 4 5 6))
   ((1 2 3) 4 5 6)
```



**But why?!**

# Thanks!

@saeidw