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