

Structure-direct

```
data S = S { a :: Int  
             , b :: String  
             }
```

```
data T = T { a :: Int  
           , b :: String  
           , c :: Bool  
           }
```

```
> view(super@S)(T 5 "abc" True)
S 5 "abc"
```

> :t (super @s)

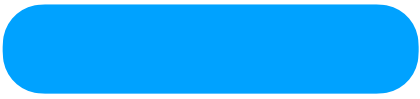
LenS TS

```
> set(super@S) (S 6 "Matt" (T 5 "abc" True)
```

```
T 6 "Matt" True
```







Structure-directed

```
data S = S { a :: Int
             , b :: String
             }
```

```
data T = T { a :: Int
             , b :: String
             , c :: Bool
             }
```

```
> :t (super @S)
```

```
Lens T S
```

```
> view (super @S) (T 5 "abc" True)
```

```
S 5 "abc"
```

```
> set (super @S) (S 6 "Matt") (T 5 "abc" True)
```

```
T 6 "Matt" True
```

```
data FormResponse = FormResponse { name :: String
                                   , age :: Int }
```

```
data Person = Person { name :: String
                       , age :: Int
                       , uniqueID :: UID
                       , dateModified :: Date
                       , userSettings :: Settings }
```

```
updatePerson :: Person -> IO Person
```

```
updatePerson p = do
```

```
  formResponse <-
```

```
    getFormResponse (view (typed @Settings
                             <◦> super @FormSettings))
                      p)
```

```
  date <- getCurrentDate
```

```
  return $ p & set (super @FormResponse)
                  formResponse
    & set (field @"dateModified")
        date
```