## Dependent assignment

## R example

Tidyverse allows us to use newly created/modified variables within a single mutate assignment. Note for the example below, area is dependent on the new length and width variables.

```
# measure in mm instead of cm and compute area

df %>%
  mutate(
   length = length * 10,
   width = width * 10,
   area = length * width) %>%
  head(5)
```

```
##
     length width area
## 1
         51
               35 1785
## 2
         49
               30 1470
         47
               32 1504
## 3
## 4
         46
               31 1426
## 5
         50
               36 1800
```

## Python example

Dependent assignment in pandas (as of 0.25.x) requires a workaround using anonymous functions.

```
(df
.assign(
  length = df["length"] * 10,
  width = df["width"] * 10,

# area = df["length"] * df["width"] this will throw an error
  area = lambda df: df["length"] * df["width"])
.head(5))
```

```
##
     length width
                     area
## 0
       51.0
             35.0 1785.0
## 1
       49.0
             30.0 1470.0
## 2
       47.0
             32.0 1504.0
## 3
       46.0
             31.0 1426.0
## 4
       50.0 36.0 1800.0
```