df-data-pivot_longer

```
library(tidyverse)
```

Examples of `pivot_longer`

Data1 - students

```
students <- data.frame(
  name = c("Alice","Bob","Charles"),
  math = c(90,85,92),
  science = c(95,88,91),
  history = c(87,92,78)
)
students
```

```
     name math science history
1   Alice   90      95      87
2     Bob   85      88      92
3 Charles   92      91      78
```

```
students_long <- students %>%
  pivot_longer(
    !name,
    names_to = "subject",
    values_to = "score"
)
students_long
```

```
# A tibble: 9 x 3
  name    subject score
  <chr>   <chr>   <dbl>
1 Alice   math       90
2 Alice   science    95
```

```
3 Alice   history    87
4 Bob     math       85
5 Bob     science    88
6 Bob     history    92
7 Charles math       92
8 Charles science    91
9 Charles history    78
```

Data2 - iris

```
head(iris)
```

```
  Sepal.Length Sepal.Width Petal.Length Petal.Width Species
1          5.1         3.5          1.4         0.2  setosa
2          4.9         3.0          1.4         0.2  setosa
3          4.7         3.2          1.3         0.2  setosa
4          4.6         3.1          1.5         0.2  setosa
5          5.0         3.6          1.4         0.2  setosa
6          5.4         3.9          1.7         0.4  setosa
```

```
irisA <- iris[,c(5,1,2,3,4)]
head(irisA)
```

```
  Species Sepal.Length Sepal.Width Petal.Length Petal.Width
1  setosa          5.1         3.5          1.4         0.2
2  setosa          4.9         3.0          1.4         0.2
3  setosa          4.7         3.2          1.3         0.2
4  setosa          4.6         3.1          1.5         0.2
5  setosa          5.0         3.6          1.4         0.2
6  setosa          5.4         3.9          1.7         0.4
```

```
iris_long <- irisA %>%
  pivot_longer(
    !Species,
    names_to = "Leaf",
    values_to = "cm"
  )
head(iris_long)
```

```
# A tibble: 6 x 3
  Species Leaf            cm
  <fct>   <chr>        <dbl>
```

```
1 setosa  Sepal.Length   5.1
2 setosa  Sepal.Width    3.5
3 setosa  Petal.Length   1.4
4 setosa  Petal.Width    0.2
5 setosa  Sepal.Length   4.9
6 setosa  Sepal.Width    3
```