

Missing Data

- **NA** - missing value
- **NULL** - absence of anything

NA

```
> x = c(1, 2, NA, 3, NA, 4); x
[1] 1 2 NA 3 NA 4
> is.na(x)
[1] FALSE FALSE TRUE FALSE TRUE FALSE
> sum(x)
[1] NA
```

Sum of the vector elements excluding NA values

```
> sum(x, na.rm = TRUE)
[1] 10
```

NULL

```
> y = c(1, NULL, 2); y
[1] 1 2
> is.null(y)
[1] FALSE
> length(y)
[1] 2
```