



INTRODUCTION TO R

Basic Data Types

logical

```
> TRUE  
[1] TRUE  
> class(TRUE)  
[1] "logical"
```

```
> FALSE  
[1] FALSE
```

```
> class(NA)  
[1] "logical"
```

```
> T  
[1] TRUE  
> F  
[1] FALSE
```

`class()` to reveal type

numeric

```
> 2
[1] 2

> 2.5
[1] 2.5

> 2L
[1] 2

> class(2)
[1] "numeric"

> class(2L)
[1] "integer"
```

numeric

```
> is.numeric(2)
[1] TRUE
```

```
> is.numeric(2L)
[1] TRUE
```

```
> is.integer(2)
[1] FALSE
```

```
> is.integer(2L)
[1] TRUE
```

integer is numeric
numeric **not** always integer

character

```
> "I love data science!"  
[1] "I love data science!"  
  
> class("I love data science!")  
[1] "character"
```

Other atomic types

- `double`: higher precision
- `complex`: complex numbers
- `raw`: store raw bytes

Coercion

```
> as.numeric(TRUE)
[1] 1
> as.numeric(FALSE)
[1] 0
> as.character(4)
[1] "4"
> as.numeric("4.5")
[1] 4.5

> as.integer("4.5")
[1] 4
> as.numeric("Hello")
[1] NA
Warning message:
NAs introduced by coercion
```



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Let's practice!