

12_Base_Types

2023-02-27

12 Base types

12.1 Introduction

12.2 Base versus OO objects

```
# A base object:  
is.object(1:10)
```

```
## [1] FALSE
```

```
sloop::otype(1:10)
```

```
## [1] "base"
```

```
# An OO object  
is.object(mtcars)
```

```
## [1] TRUE
```

```
sloop::otype(mtcars)
```

```
## [1] "S3"
```

```
#> [1] "S3"
```

```
attr(1:10, "class")
```

```
## NULL
```

```
attr(mtcars, "class")
```

```
## [1] "data.frame"
```

```
x <- matrix(1:4, nrow = 2)  
class(x)
```

```
## [1] "matrix" "array"
```

```
sloop::s3_class(x)
```

```
## [1] "matrix" "integer" "numeric"
```

12.3 Base types

```
typeof(1:10)
```

```
## [1] "integer"
```

```
typeof(mtcars)
```

```
## [1] "list"
```

```
typeof(NULL)
```

```
## [1] "NULL"
```

```
typeof(1L)
```

```
## [1] "integer"
```

```
typeof(1i)
```

```
## [1] "complex"
```

```
typeof(mean)
```

```
## [1] "closure"
```

```
typeof(`~`)
```

```
## [1] "special"
```

```
typeof(sum)
```

```
## [1] "builtin"
```

```
typeof(globalenv())
```

```
## [1] "environment"
```

```
mle_obj <- stats4::mle(function(x = 1) (x - 2) ^ 2)
typeof(mle_obj)
```

```
## [1] "S4"
```

```
typeof(quote(a))
```

```
## [1] "symbol"
```

```
typeof(quote(a + 1))
```

```
## [1] "language"
```

```
typeof(formals(mean))
```

```
## [1] "pairlist"
```

12.3.1 Numeric type

```
sloop::s3_class(1)
```

```
## [1] "double" "numeric"
```

```
sloop::s3_class(1L)
```

```
## [1] "integer" "numeric"
```

```
typeof(factor("x"))
```

```
## [1] "integer"
```

```
is.numeric(factor("x"))
```

```
## [1] FALSE
```