Prediction 1 - tidyverse

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Table of Contents

- `stringr` package
- `lubridate` package
- Combining objects
- Today's in-class assignment: `betting-markets`

stringr package

stringr package

- a package in tidyverse for manipulating strings
- here we use the function `str_c()`
- for more information, see here

str_c function

- combining multiple objects into a character string
- each object will be separated by commas

Example

```
a <- 2
b <- 6
print(str_c(a, " times 3 is equal to ", b))

## [1] "2 times 3 is equal to 6"
```

lubridate package

lubridate package
- a package in tidyverse for dates-times object
- for more information, see here

ymd function
- converting strings in the format of `year-month-date` into a date object
- when subtracting a `date` object from another, the object will be a `difftime` object.

lubridate package - Example

```r
# Converting an object into a date object
x <- ymd("2008-11-04")
y <- ymd("2008/9/1")
class(x)
```

```
## [1] "Date"
```

```r
# When subtracting a date object from another,
# it will be a `difftime` object
subtraction <- x - y
class(subtraction)
```

```
## [1] "difftime"
```

Combining objects (data frame, vector, or matrix)

base R function

- `cbind(x, y)`: combine x and y by columns
- `rbind(x, y)`: combine x and y by rows
- `merge(x, y, by = )`: merging two data frames by common columns or row names

tidyverse function `bind` (be careful!)

- `bind_cols(x, y)`: combine x and y by columns
- `bind_rows(x, y)`: combine x and y by rows

tidyverse function `mutate-joins`

- `inner_join(x, y, by = )`: includes all rows in x and y
- `left_join (x, y, by = )`: includes all rows in x
- `right_join (x, y, by = )`: includes all rows in y
- `full_join (x, y, by = )`: includes all rows in x or y