**xts Cheat Sheet**

- **xts** is an extensible time series package that provides an extensible time series class, enabling uniform handling of many R time series classes by extending zoo.

**Load the package as follows:**

```r
library(xts)
```

**xts Objects**

- xts objects have three main components:
  - R dataframe or matrix for xts objects, which could also be a vector for zoo objects
  - `order.by`: vector of time data, POSIXct, yearmon, yearqtr, or dates/chars objects
  - `attributes` arbitrary attributes

**Creating xts Objects**

```r
xts1 <- xts(x=1:10, order.by=Sys.Date()-1:10)
```

**Convert To And From xts**

- `data/df/passengers`
  ```r
  xts2 <- as.xts(df/passengers)
  ```

**Import From Files**

- `~/.rprofile` or `~/.Rprofile`
  ```r
  # Read CSV file
  xts1 <- read.csv("~/.rprofile")
  ```

**Applying Functions**

```r
tzone(xts1) <- index
```

**Selecting, Subsetting & Indexing**

- **Select**
  ```r
  xts1[2017-05-01:2017-05-07]
  ```

**Missing Values**

- **Export xts Objects**
  ```r
  xts.xts <- as.xts(xts.xts)
  ```

- **Replace & Update**
  ```r
  # Replace missing values in xts or dats with NA
  xts.last <- na.locf(xts.last)
  ```

- **Arithmetic Operations**
  ```r
  coredata(as.numeric(xts1))
  ```

**Apply to Periodicity and Time Stamps**

- **Missing Values**
  ```r
  na.approx(xts2)
  ```

- **Reindexing**
  ```r
  xts_last <- na.locf(xts2, useNA=" intercourse")
  ```

**Others Useful Functions**

- **Inspect your data**
  ```r
  coredata(as.numeric(xts1))
  ```

- **Select & Extract**
  ```r
  as.xts.as.df(as.xts.xts)
  ```

- **Data Frames**
  ```r
  cbind(xts1, xts2)
  ```

- **Subset and Extract**
  ```r
  xts2[2017-05-01:2017-05-07]
  ```

- **Na Impute**
  ```r
  na.impute(xts2)
  ```

- **Interpolate**
  ```r
  xts_last <- na.locf(xts2, useNA="none")
  ```

- **Extract Core Data**
  ```r
  coredata(xts4)
  ```

- **Periodicity and Time Stamps**
  ```r
  as.xts(as.data.frame(xts1))
  ```

- **Data Structure**
  ```r
  xts1 %is.numeric()
  ```

- **Date Manipulation**
  ```r
  xts1[2017-05-01:2017-05-07]
  ```

- **Xts Cheat Sheet**
  ```r
  xts Cheat Sheet
  ```

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**xts Cheat Sheet**

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