

DATA CLASS CONVERSION *R Programming*

7 of June 2013

Al-Ahmadgaid B. Asaad
alstated@gmail.com

Data in R can be converted from one class to the other. The functions are prefixed with `as.` then followed by the name of the data class that we wish to convert to. Data class in R are the following:

- numeric - `as.numeric`;
- vector - `as.vector`;
- character - `as.character`;
- matrix - `as.matrix`; and,
- data frame - `as.data.frame`.

Hence, if one wishes to convert a numeric data points 32, 35, 38, 29, 27, 40, and 33 into a character. Then, this is achieved by

```
> data <- c(32, 35, 38, 29, 27, 40, 33)
> data
[1] 32 35 38 29 27 40 33
>
> data.ch <- as.character(data)
> data.ch
[1] "32" "35" "38" "29" "27" "40" "33"
```

Notice the difference between the output of the `data` object and the converted one, `data.ch`? The output differs only with this character, `"`. This character that encloses every data points suggests that the data is now in character form. And this can be verified using the function `class`,

```
> class(data.ch)
[1] "character"
```

Now consider this,

```
> var1 <- c(5, 6, 3, 4, 5)
> var2 <- c(11, 12, 13, 13, 15)
> var3 <- c(26, 25, 24, 22, 23)
```

These objects are in numeric class, and converting these to data frame with three variables, would be

```
> data.f1 <- data.frame(var1, var2, var3)
> data.f1
  var1 var2 var3
1     5    11   26
2     6    12   25
3     3    13   24
4     4    13   22
5     5    15   23
>
> class(data.f1)
[1] "data.frame"
```

Further to matrix class, we have

```
> data.mat <- as.matrix(data.f1)
> data.mat
      var1 var2 var3
[1,]     5    11   26
[2,]     6    12   25
[3,]     3    13   24
[4,]     4    13   22
[5,]     5    15   23
>
> class(data.mat)
[1] "matrix"
```

Labels

R, Tutorial