

Adding new column with a hourly time series XTS object

The question is how to add a new column of data with an XTS object which has an hourly time series. First we need to make an XTS object with a single column of data.

```
library(zoo)
library(xts)
Sys.setenv(TZ="Asia/Dhaka")
#Hourly time series
timeseries ← seq(from=as.POSIXct("2010-01-13 00:00:00
BST"), to=as.POSIXct("2010-03-13 23:59:59 BST"),
by="hour")
value ← rnorm(n=length(timeseries))
irreg ← xts(value, order.by = timeseries)
```

It Should be look like that,

```
>head(irreg)
              [,1]
2010-01-13 00:00:00 -3.01393740
2010-01-13 01:00:00  0.38373591
2010-01-13 02:00:00  0.73691805
2010-01-13 03:00:00  1.32290929
2010-01-13 04:00:00  0.07816162
2010-01-13 05:00:00 -0.54784272
```

Now we will add another new column with this. For that we have to extract the core data of this object as an matrix.

```
> data_matrix = as.matrix(coredata(irreg))
```

Then transform the matrix in to a dataframe,

```
> df = as.data.frame(data_matrix)
```

Now we will create a new list of random values which has the same number of rows as our data frame df has.

```
> value <- rnorm(n=row(df))
```

After that we will combine the value with our data frame df as a new column.

```
> df$newColumn = value
```

We have added the column successfully. Now it's time make the XTS obj irreg again.

```
df$newColumn = value
```

```
> irreg <- xts(x = df, order.by = timeseries)
```

Now it will look like that,

```
> head(irreg)
```

	V1	newColumn
2010-01-13 00:00:00	-3.01393740	-0.6308248
2010-01-13 01:00:00	0.38373591	-0.9956590
2010-01-13 02:00:00	0.73691805	-0.8248706
2010-01-13 03:00:00	1.32290929	0.3687436
2010-01-13 04:00:00	0.07816162	0.1268100

****Write all the codes in R-studio console**

