

case_study_2

sunna quazi and patrick mcdevitt

21 avril 2017

Question 01

Create the X matrix and print it from SAS, R, and Python.

```
X = [4 5 1 2]
     [1 0 3 5]
     [2 1 8 2]
```

```
# ... -----
# ...   in R, 1st as a data frame and 2nd as a matrix
# ... -----
```

```
x1 <- c(4, 5, 1, 2)
x2 <- c(1, 0, 3, 5)
x3 <- c(3, 1, 8, 2)
df_X <- rbind.data.frame(x1, x2, x3)
names(df_X) <- c("c1", "c2", "c3")
df_X
```

```
##   c1 c2 c3 NA
## 1  4  5  1  2
## 2  1  0  3  5
## 3  3  1  8  2
```

```
A = matrix(
  c(4, 5, 1, 2, 1, 0, 3, 5, 3, 1, 8, 2), # the data elements
  nrow = 3,                             # number of rows
  ncol = 4,                             # number of columns
  byrow = TRUE)                         # fill matrix by rows
A
```

```
##      [,1] [,2] [,3] [,4]
## [1,]    4    5    1    2
## [2,]    1    0    3    5
## [3,]    3    1    8    2
```