STA 6707: HW 4

Due in class: Thu April 14

Problem 1:

The crabs data set describes the morphological measurements of 200 crabs, of the species Leptograpsus variegatus collected at Fremantle, W. Australia back in 1974. The variables are described next:

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Species: 1 for blue crabs and 2 for orange crabs
Sex: 1=male, 2=female
FL: frontal lobe size measured in mm
RW: rear width in mm
CL: carapace length in cm
CW: carapace width in cm
BD: body depth in cm
```

Analyze the results using MDS and compare the solution to the one obtained using PCA. Comments of similarities and differences.

Problem 2:

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This data set contains information about the evolution of US interest rates over the last 4.5 years.

The variables are described next:

1) DATE
2) m1: 1 month rate
3) m3: 3 month rate
4) m6: 6 month rate
5) y1: 1 year rate
6) y2: 2 year rate
7) y3: 3 year rate
8) y5: 5 year rate
9) y7: 7 year rate
10) y10: 10 year rate
11) y20: 7 year rate

Analyze the results using MDS and compare the solution to the one obtained using PCA. Comments of similarities and differences.