# Complex Data lab 3

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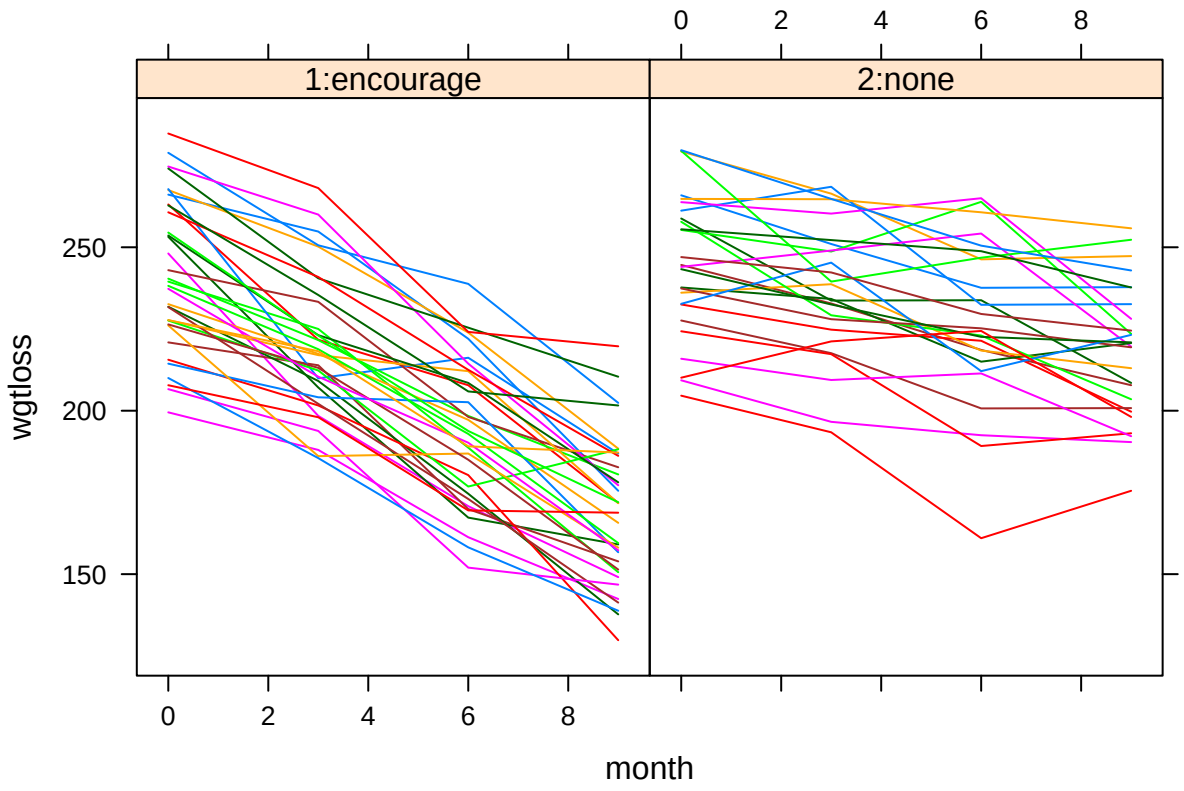
```
##          1        2
## 0 241.6088 244.9500
## 3 219.2059 237.0038
## 6 193.7706 227.1192
## 9 169.0441 218.0346
```

```
##          1        2
## 0 23.01513 21.72067
## 3 21.19745 20.40583
## 6 21.92547 24.62901
## 9 21.99597 20.59980
```




CS vs. UN

| Structure | -2 REML Log-Likelihood | Number of Cov. Parameters |
|---|---|---|
| Compound Symmetry | 1905.8232 | 10 |
| Unstructured | 1900.8766 | 18 |
| Difference | 4.9466 | 8 |

Unstructured vs compound symmetry

```
##               Model df      AIC      BIC    logLik   Test  L.Ratio p-value
## wtloss.un.cat     1 18 1936.877 1998.918 -950.4383
```

```
## wtloss.cs.cat     2 10 1925.823 1960.291 -952.9116 1 vs 2 4.946568  0.7633
```

Unstructured vs auoregressive

```
##                 Model df      AIC      BIC    logLik   Test  L.Ratio
## wtloss.un.cat       1 18 1936.877 1998.918 -950.4383
## wtloss.ar1.cat      2 10 1951.247 1985.714 -965.6234 1 vs 2 30.37015
##                 p-value
## wtloss.un.cat
## wtloss.ar1.cat    2e-04
```

Autoregressive vs compound symmetry

```
##                 Model df      AIC      BIC    logLik
## wtloss.cs.cat       1 10 1925.823 1960.291 -952.9116
## wtloss.ar1.cat      2 10 1951.247 1985.714 -965.6234
```

AUC - test for equality of the area under the curve in two groups.

Parametric curves - quadratic time trend

Linear time trend

Testing for intersections