02441 Applied Statistics and Statistical Software

Exercise 2C - Process

The dataset process contains measurements of air flow, water temperature, and acid concentration of a process loss.

Variable name	Description
loss	loss from process
airflow	air flow
watertemp	temperature of water
acidconc	concentration of acid

1. Determine whether air flow, temperature of water, or concentration of acid influence on the process loss by a graphical comparison

Start by loading the data

```
# Code here
```

2. Determine whether air flow, temperature of water or concentration of acid influence on the process loss by analysing each variable using simple linear regression

Making simple regression for each variable

```
# Code here
```

3. Determine whether air flow, temperature of water or concentration of acid influence on the process loss using multiple linear regression

```
# Code here
```

4. Is there evidence of multicollinearity?

```
#Code here
```

5. Plot the residuals and analyse the results. Which x-variable should be removed if we want to reduce the model?

```
# Code here
```