

MS4S09 Coursework 2 - 2020/21

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## Warning: package 'magrittr' was built under R version 4.0.3
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## Warning: package 'knitr' was built under R version 4.0.3
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Task 1 – Getting the data (10%)

Download the data

Mean Dataset <https://www.metoffice.gov.uk/pub/data/weather/uk/climate/datasets/Tmean/date/UK.txt>

Min Dataset <https://www.metoffice.gov.uk/pub/data/weather/uk/climate/datasets/Tmin/date/UK.txt>

Max Dataset <https://www.metoffice.gov.uk/pub/data/weather/uk/climate/datasets/Tmax/date/UK.txt>

Create time series objects

Task 2 – R programming (5%)

Task 3 – Exploratory Data Analysis (25%)

Task 4 – Trend and Seasonality (25%)

Trend estimation

Trend model selection

Seasonality estimation

Seasonal model selection

Final combined model

Test model

Task 5 – ARMA and Forecasting (25%)

Remove trend and seasonal model using the two models from previous tasks

ARMA model fit

Forecast of the two models

Forecasts Comparison

Report (10%)

Leave this section blank for marking