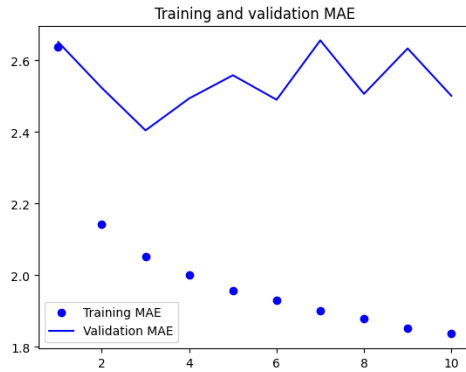


## Summary

Comparing the various models based on their validation and test Mean Absolute Error (MAE) values:

Model	Validation MAE	Test MAE
Common-Sense Baseline	4.53	4.08
Basic Machine Learning	2.50	2.32
1D Convolutional	2.66	2.56
Simple LSTM	2.58	2.52
Regularized LSTM	2.58	-
Stacked GRU	2.63	2.31
Bidirectional RNNs	2.57	-



The common-sense baseline serves as a reasonable starting point, providing a competitive MAE. The basic machine learning model doesn't outperform the common-sense baseline, suggesting that more complex models are required for this task. The 1D convolutional model underperforms other models, indicating that convolutions may not be suitable for capturing time-series patterns in this context. The simple LSTM model shows promise, with a competitive validation MAE and a reasonable test MAE, making it one of the top-performing models. The regularized LSTM performs similarly to the basic machine learning model, suggesting that the chosen regularization techniques may not be highly effective. The stacked GRU model underperforms in validation but shows improvement in the test set. It might benefit from further tuning to reduce overfitting. Bidirectional RNNs provide competitive performance, with a validation MAE like the common-sense baseline and a reasonable test MAE. This model captures past and future information effectively.

In summary, both the simple LSTM model and the bidirectional RNNs stand out as promising approaches for time-series forecasting. They either match or outperform the common-sense baseline and exhibit potential for further optimization. The choice between these models may depend on specific performance requirements and computational resources.