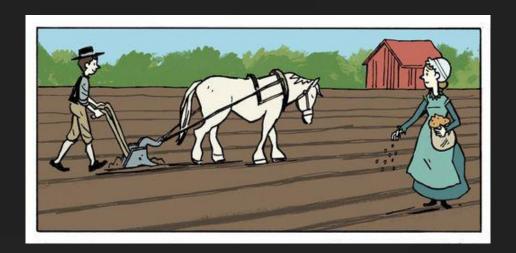


### / Time data



Once upon a time there was a farming couple who lived happily from their harvest.



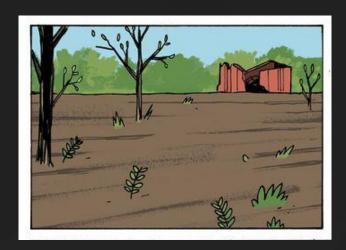


# They left the farm because they did not see the drought and high temperatures coming.



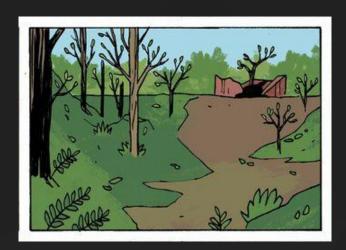


### Years went by and the whole farm went to waste





## Very bad although there were good seasons with stable temperatures.



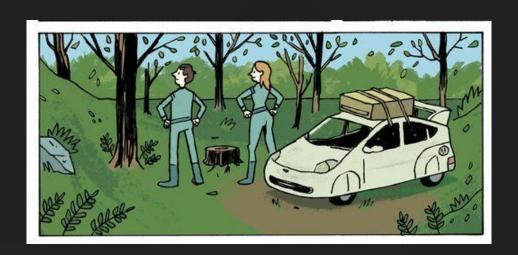


#### So bad...



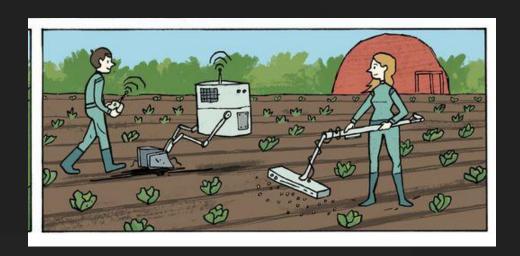


## Until one day, the farmers' grandchildren came along and wanted to continue their grandparents' life.



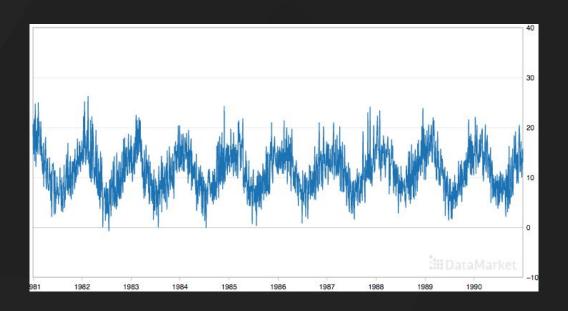


# Modernized the farm with robots and installed thermometers for predictive temperature modeling





### Here is the temperature collected from the robot





### Your task is to help the new farmers by predicting the coming temperature

- Extract year, month and day\_of\_mont
- 2. Get lags features  $\rightarrow$  Pandas shift()
  - a. The temperature of day before, and 2 days ago
- Rolling Window Statistics → Pandas rolling()
  - a. Mean, min & max of 7 previous days
- 4. Try new features
- 5. Select the year 1990 as a validation set
- 6. Try some some ML models to predict 1990
  - a. You can use the RMSE as the metric

