Project3_Final_675

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```
library(readr)
library(prophet)
```

```
## Loading required package: Rcpp
```

```
## Loading required package: rlang
```

```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
#install.packages("cli")
library(cli)
library(ggplot2)

df <- read_csv("C:/Users/Kelsey/Downloads/ProphetEnergy.csv")
```

```
## New names:
## • `` -> `...1`
```

```
## Rows: 407023 Columns: 3
## ── Column specification ────────────────────────────────────────────────────────
## Delimiter: ","
## dbl  (2): ...1, y
## date (1): ds
##
## ℹ Use `spec()` to retrieve the full column specification for this data.
## ℹ Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

```
summary(df)
```

```
##       ...1             ds                   y          
##  Min.   :     0   Min.   :2010-01-20   Min.   :     0.0  
##  1st Qu.:101756   1st Qu.:2013-12-24   1st Qu.:     0.0  
##  Median :203511   Median :2016-06-23   Median :    24.6  
##  Mean   :203513   Mean   :2016-09-10   Mean   :    64.8  
##  3rd Qu.:305270   3rd Qu.:2020-01-24   3rd Qu.:    91.2  
##  Max.   :407030   Max.   :2022-02-09   Max.   :329074.0
```

```
m <- prophet(df)
```

```
## Disabling daily seasonality. Run prophet with daily.seasonality=TRUE to override this.
```

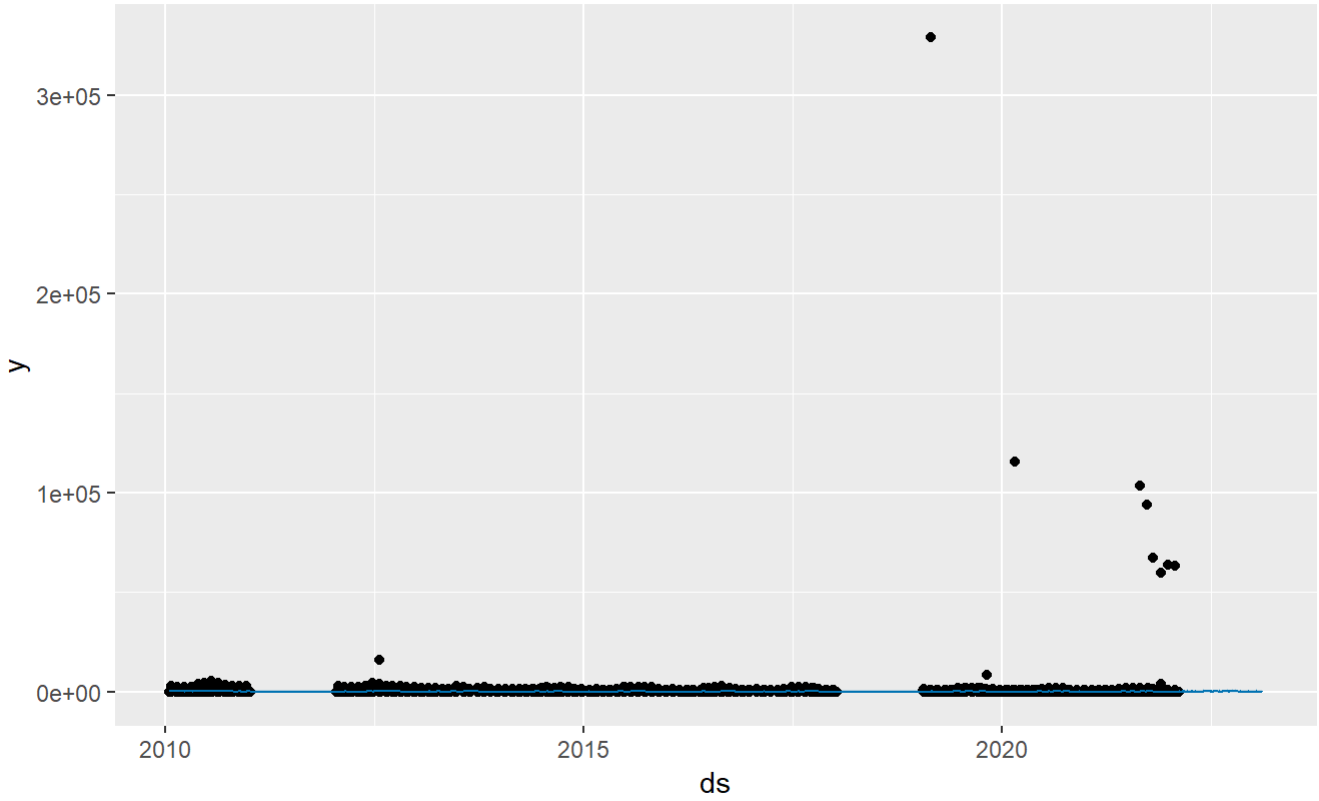
```
future <- make_future_dataframe(m, periods = 365)
tail(future)
```

```
##             ds
## 1056 2023-02-04
## 1057 2023-02-05
## 1058 2023-02-06
## 1059 2023-02-07
## 1060 2023-02-08
## 1061 2023-02-09
```

```
forecast <- predict(m, future)
tail(forecast[c('ds', 'yhat', 'yhat_lower', 'yhat_upper')])
```

```
##             ds      yhat yhat_lower yhat_upper
## 1056 2023-02-04 244.20839  -593.1429  1093.4781
## 1057 2023-02-05 275.10869  -556.3684  1143.1089
## 1058 2023-02-06  47.43327  -846.4064   884.1624
## 1059 2023-02-07  44.02360  -822.8169   871.9406
## 1060 2023-02-08  43.57137  -787.0546   895.5649
## 1061 2023-02-09  39.19138  -739.0574   896.2939
```

```
plot(m, forecast)
```


3e+05
2e+05
1e+05
0e+00
y
2010
2015
2020
ds