govhack

team 2078

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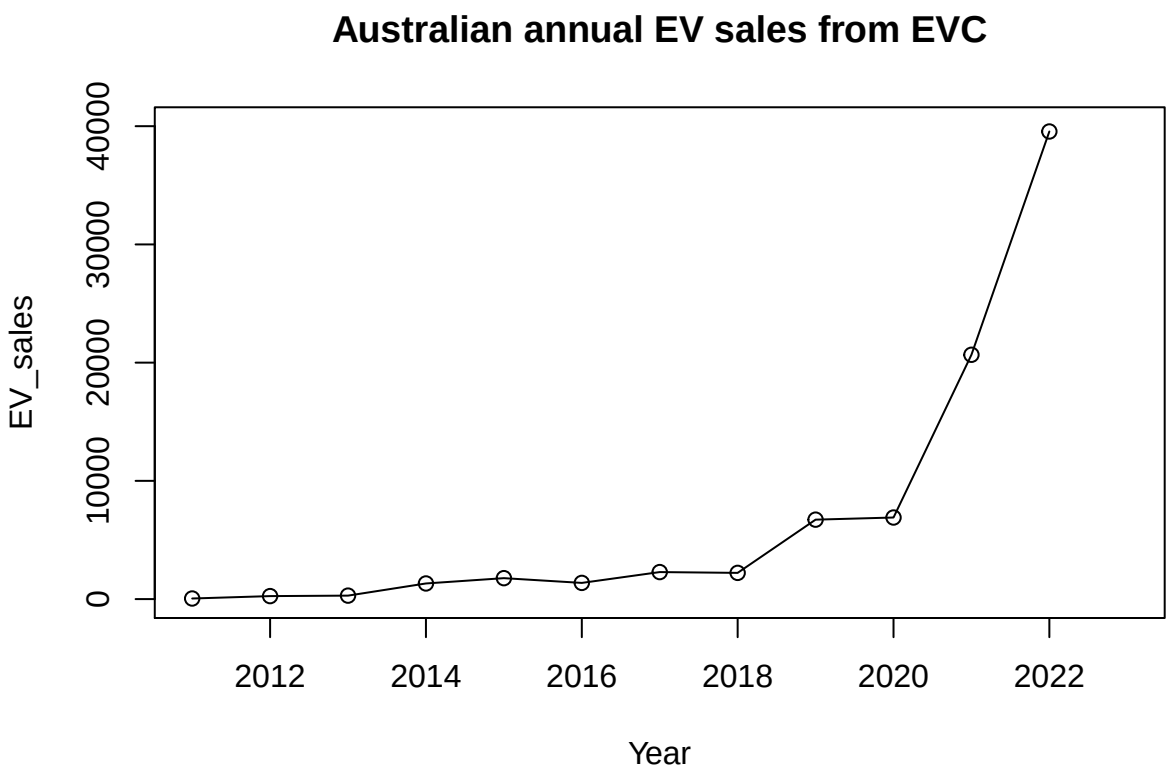
```
Year <- 2011:2022
EV_sales <- c(49, 253, 293,1322,1771,1369,2284,2216,6718,6900, 20665,39553)
plot(Year,EV_sales, xlim = c(2011,2023), main = "Australian annual EV sales from EVC", ylim = c(0, 4000
lines(Year, EV_sales)
```




```
# Load the required libraries
library(forecast)
```

```
## Registered S3 method overwritten by 'quantmod':
##   method            from
##   as.zoo.data.frame zoo
```

```
# Create the time series object
EV_sales_ts <- ts(EV_sales, start = 2011, frequency = 1)

# Fit an ARIMA model to the time series data
# Here, we use auto.arima to automatically select the best ARIMA model
model <- auto.arima(EV_sales_ts)
```

```r
# Forecast the next 'n' periods
n_forecast <- 3  # You can adjust this based on how far you want to forecast
forecast_result <- forecast(model, h = n_forecast)

# Print the forecasted values
print(forecast_result)
```

```
##      Point Forecast    Lo 80     Hi 80    Lo 95     Hi 95
## 2023          58441 51968.76  64913.24 48542.57  68339.43
## 2024          77329 62856.64  91801.36 55195.43  99462.57
## 2025          96217 72000.10 120433.90 59180.45 133253.55
```

```r
# Plot the original data and the forecasted values
plot(forecast_result, main = "EV Sales Forecast", xlab = "Year", ylab = "Sales")
lines(EV_sales_ts, col = "black")
```