

project

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```
library(tidyr)
library(forecast)
```

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

```
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
```

```
electricity_df<-read.csv(file="Electricity_Sales_to_Ultimate_Customers_Total_Monthly.csv")
head(electricity_df)
```

```
##      Month Series.ID..TOTAL.ESTCPUS.M.Million.Kilowatthours
## 1 May-22                                307105.7
## 2 Apr-22                                283846.5
## 3 Mar-22                                303490.0
## 4 Feb-22                                304272.3
## 5 Jan-22                                336691.8
## 6 Dec-21                                306581.2
```

```
electricity_new<-separate(electricity_df, col=Month, into=c('Month', 'Year'), sep='-')
head(electricity_new)
```

```
##      Month Year Series.ID..TOTAL.ESTCPUS.M.Million.Kilowatthours
## 1   May   22                                307105.7
## 2   Apr   22                                283846.5
## 3   Mar   22                                303490.0
## 4   Feb   22                                304272.3
## 5   Jan   22                                336691.8
## 6   Dec   21                                306581.2
```

```

electricity_new$Year <-as.numeric(electricity_new$Year)
electricity_new<-electricity_new %>%
mutate(electricity_new, YEAR = ifelse(Year %in% 0:9,paste(200, Year, sep=""),
                                     ifelse(Year %in% 10:22,paste(20, Year, sep=""),
                                     ifelse(Year %in% 73:99, paste(19, Year, sep=""),"")))))
head(electricity_new)

```

```

##   Month Year Series.ID..TOTAL.ESTCPUS.M.Million.Kilowatthours YEAR
## 1   May   22                307105.7 2022
## 2   Apr   22                283846.5 2022
## 3   Mar   22                303490.0 2022
## 4   Feb   22                304272.3 2022
## 5   Jan   22                336691.8 2022
## 6   Dec   21                306581.2 2021

```