Airline=c(878, 1005, 1173, 883, 972, 1125, 1336, 988, 1020, 1146, 1400, 1006, 1108, 1288, 1570, 1174, 1227, 1468, 1736, 1283)

logAirline=log(Airline)

plot.ts(Airline)

plot.ts(logAirline)

# In order to demonstrate the Box-Cox transformation, I’ll introduce Rob Hyndman’s `forecast` package:

library(forecast)

# It has two functions that are of use here. The primary function is BoxCox(), which will return a transformed time series given a time series and a value for the parameter lambda:

plot.ts(BoxCox(logAirline, lambda = 0.5))

# We can use the BoxCox.lambda() function, which will provide us an optimal value for parameter lambda:

lambda <- BoxCox.lambda(Airline)

print(lambda)

-#-import the data”passenger”

passenge=read.table("C:/Users/gmpan/Desktop/passenge.txt")

--------------------------- build a regression model

mlr=lm(y\_t~t+D\_1+D\_2+D\_3,data=passenge)

summary(mlr)

-#-- produce the actual data and predictions in one figure

plot(1:20,y,xlim = c(0, 26), ylim=c(6.6, 7.6)))

lines(1:20, y, type="l" )

lines(1:20, y-mlr$residuals, type="l", col="red")