Data Manipulation

Lab 9 Work

Hints: Lab 8

Grammar is not as in R

```
t = 0
i = 0
do while(i.le.dimsizes(time)-365)
print(t)
if(any(isleapyear(year(i))))
mp1mon(t,0:365,:,:) = pre(i:i+365,:,:)
i = i + 366
else
mp1mon(t,0:364,:,:) = pre(i:i+364,:,:)
i = i + 365
end if
t = t + 1
end do
```

There are 30 leap years between 1900 and 2020:
1904, 1908, 1912, 1916, 1920, 1924, 1928, 1932, 1936, 1940, 1944, 1948, 1952, 1956, 1960, 1964, 1968, 1972, 1976, 1980, 1984, 1988, 1992, 1996, 2000, 2004, 2008, 2012, 2016, 2020

library(lubridate)

Code	Value
%d	Day of the month (decimal number)
%m	Month (decimal number)
%b	Month (abbreviated)
%B	Month (full name)
%y	Year (2 digit)
%Y	Year (4 digit)

Minutes to Daily Data

```
data <- read.csv("sample_weather_data.csv", header = TRUE)
head(data)

data.AT <- data$AirTC
data.RH <- data$RH
length(data.AT)
```

15 Mins

```
trnd <- lm(dataAT_daily~dates)
plot(x=dates, y=dataAT_daily, type = "l", col = "1", main =
"Daily Data", ylab = "AT", xlab = "Days")
abline(trnd, col="red")
```

Daily

Daily Data