setwd ("C:\Users\sudip.bandyopadhyay\Documents\R\WORK AREA")

function(directory, pollutant = "sulfate", id = 1:332) {

## 'directory' is a character vector of length 1 indicating

## the location of the CSV files

## 'pollutant' is a character vector of length 1 indicating

## the name of the pollutant for which we will calculate the

## mean; either "sulfate" or "nitrate".

## 'id' is an integer vector indicating the monitor ID numbers

## to be used

## Return the mean of the pollutant across all monitors list

## in the 'id' vector (ignoring NA values)

# set working directory

if(grep("specdata", directory) == 1) {

directory <- ("./specdata/")

}

# initialize a vector to hold the pollutant data

mean\_vector <- c()

# find all files in the specdata folder

all\_files <- as.character( list.files(directory) )

file\_paths <- paste(directory, all\_files, sep="")

for(i in id) {

current\_file <- read.csv(file\_paths[i], header=T, sep=",")

head(current\_file)

pollutant

na\_removed <- current\_file[!is.na(current\_file[, pollutant]), pollutant]

mean\_vector <- c(mean\_vector, na\_removed)

}

result <- mean(mean\_vector)

return(round(result, 3))

}

pollutantmean("specdata", "sulfate", 1:10)

[1] 4.064

> pollutantmean("specdata", "nitrate", 70:72)

[1] 1.706

> pollutantmean("specdata", "nitrate", 23)

[1] 1.281