As some other people suggested already I think it is a nice idea to share the codes, because I am pretty sure there are multiple ways of solving the Assignments and even if people have the same idea, their code might be different. And I do not want to solve the assignments, but also to know what is the most efficient way.   
As it is said in the videos: Programmers are lazy and I want to learn to be lazy ;)   
(And btw. I am sure you can even google all the assignments and solutions so no need to delete the codes presented here)  
  
  
Here we go (Copy directly from R and not from the textfile to get the frame)  
1

> pollutantmean <- function(directory, pollutant, id = 1:332) {

+ file\_list <- list.files(directory, full.names = TRUE)

+ dat <- data.frame() #Here I learned, initialize your needed stuff outside the loop!

+ for (i in id) {

+ dat <- rbind(dat, read.csv(file\_list[i]))

+ }

+ mean(dat[ , pollutant], na.rm = TRUE)

+

+ }

2  
I am pretty sure that there are alternatives for Part 2! How did I do it?   
with rowSums > 0 and na.rm = TRUE data with NA in it is not  > 0 and is FALSE and therefore 0, data without NA is > 0 and therefore TRUE and counted as 1.

> complete <- function(directory, id = 1:332) {

+ file\_list <- list.files(directory, full.names = TRUE)

+ output <- data.frame()

+ nobs <- vector()

+ for (i in id) {

+ nobs <- c(nobs, nrow(i)) #Don't know if this is necessary?

+ dat\_frame <- read.csv(file\_list[i])

+ dat\_frame2 <- data.matrix(dat\_frame, rownames.force = NA)#Found this rownames.force very usefull!

+ nobs[i] <- sum((rowSums(dat\_frame2) > 0), na.rm = TRUE) # I am sure there are other possibilities!

+ }

+ output <- data.frame(id, nobs[id])

+ colnames(output) <- c("id", "nobs")

+ }

3 My problem here: I was not sure if I could use parts of part 2 of my code. Because with all the rownames.force and using sum and all that stuff I thought I might lost some data I would need for part 3. So I started from the scratch again

> corr <- function(directory, threshold = 0) {

+ file\_list <- list.files(directory, full.names = TRUE)

+ cor\_data <- vector()

+ for (i in 1:332) {

+ data <- read.csv(file\_list[i])

+ clean\_data <- na.omit(data)

+ if(nrow(clean\_data) > threshold)

+ cor\_data[i] <- cor(clean\_data$nitrate,clean\_data$sulfate)

+ }

+ print(cor\_data)

+ }