**Answer script**

**Task [A] + Task [B]**

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| **System requirements** | Laptop minimum core i-3 ,  Internet ,  Browser |
| **Tools / Software**  **{Environment set up}** | [1] Install R  Download Link  <https://cran.r-project.org/bin/windows/base/>    [2] R Studio (Choose for Windows/Mac )  Download Link  <https://www.rstudio.com/products/rstudio/download/#download> |
| **Useful Guideline** | <https://www.youtube.com/watch?v=NZxSA80lF1I&list=PLLFFb02ZruKrUYNFD7qjPabObDekHaQXa&index=5> |
| **Input File** | data\_cases\_1.csv,  data\_cases\_2.csv,  marged\_data\_cases.csv |
| **Output File** | Output.json |
| **Installed Packages** | Rjson  Plyr  Readr |

**Program**

**# Program for Marge data\_case1.csv & data\_case2.csv**

**{This program is for combined dataset}**

**#STEP1** To Know about working directory

getwd()

**#STEP2** Set working directory in folder Test\_wd

setwd(“C:/Users/HP/OneDrive/Documents/Test\_wd”)

**#STEP3** Read CSV [1] file data\_cases\_1 and stored in data frame datafile1

datafile1 <- read.csv("data\_cases\_1.csv”, header = TRUE, sep =”,“ )

**#STEP4** Read CSV file [2] data\_cases\_2 and stored in data frame datafile1

datafile2 <- read.csv(“data\_cases\_2.csv”, header = TRUE, sep =”,“ )

**#STEP5** Data-bind CSV file [1] and CSV file [2] in new data frame

newdatafile <- rbind(datafile1, datafile2)

**#STEP5** Write/Store data in a marge CSV file marged\_data\_cases.csv

write.csv(newdatafile, "marged\_data\_cases.csv")

**# Program for output file as given examples**

**#STEP6** Find total number of cases

tcases <- sum(newdatafile$total\_number\_cases)

sprintf(“Total number of reported cases is: %d“ , tcases)

tcase\_op <- sprintf(“Total number of reported cases is: %d“ , tcases)

**#STEP7** Find total number of death cases at each location

deathbyloc\_op <- print(“Total number of deaths reported at each location : ”)

**#STEP8** Find Sum for Group by data : location

aggregate(newdatafile$number\_mortality, list(newdatafile$location), FUN = sum)

groupdata <- aggregate(newdatafile$number\_mortality, list(newdatafile$location), FUN = sum)

**#STEP8** install Package for json

install.packages("rjson")

library(rjson)

**#STEP9** convert data frame to Json

myfile = toJSON(groupdata)

**#STEP10** store data in tcase\_op for showing output of Total number of reported death cases

tcase\_op <- sprintf("total number of reported cases is : %d ", tcase)

**#STEP11** data bind

Output <- rbind( tcase\_op, deathbyloc\_op)

**#STEP12** final code for showing output in output.json file

write(output, "output.json")

write(myfile, "output.json", append = TRUE)