1.

library(tidyr)

data\_long = gather(country, detail, value, population\_in\_million:gdp\_percapita, factor\_key=TRUE)

data\_long

2.

country\_w\_to\_L<- reshape(data=country, idvar="countries",

varying = c("population\_in\_million","gdp\_percapita"),

v.name=c("value"),

times=c("population\_in\_million","gdp\_percapita"),

new.row.names = 1:1000,

direction="long")

country\_w\_to\_L

MELTING AND CASTING :-

1.

names(airquality) <- tolower(names(airquality))

head(airquality)

aql <- melt(airquality)

2.

aql <- melt(airquality, id.vars = c("month", "day"))

aqw <- dcast(aql, month + day ~ variable)

head(aqw)

3.

names(airquality) <- tolower(names(airquality))

aqm <- melt(airquality, id=c("month", "day"), na.rm=TRUE)

acast(aqm, day ~ month ~ variable)

acast(aqm, month ~ variable, mean)

acast(aqm, month ~ variable, mean, margins = TRUE)

dcast(aqm, month ~ variable, mean, margins = c("month", "variable"))

4.

DataSet <- airquality

str(DataSet)

colnames(DataSet)

Na <- summary(is.na(DataSet))

print(Na)

FILE MANUPALATION

1.

data <- read.csv("input.csv")

print(data)

a)

sal <- max(data$salary)

print(sal)

b)

retval <- subset(data, salary == max(salary))

print(retval)

c)

retval <- subset( data, dept == "IT")

print(retval)

d)

info <- subset(data, salary > 600 & dept == "IT")

print(info

e)

retval <- subset(data, as.Date(start\_date) > as.Date("2014-01-01"))

print(retval

4.

write.csv(retval,"output.csv")

newdata <- read.csv("output.csv")

print(newdata)