# Assignment (8.1) 31- Dec 2017

1. Use the package RcmdrPlugin.IPSUR.

data(RcmdrTestDrive)

and perform the below operations:

a. Calculate the average salary by gender and smoking status.

Sol:- > library(RcmdrPlugin.IPSUR)

RcmdrMsg: [1] NOTE: R Commander Version 2.4-1: Wed Feb 14 22:24:10 2018

> data("RcmdrTestDrive")

RcmdrMsg: [2] NOTE: The dataset RcmdrTestDrive has 168 rows and 9 columns.

Rcmdr> with(RcmdrTestDrive, tapply(salary, list(gender, smoking), mean,

Rcmdr+ na.rm=TRUE))

Nonsmoker Smoker

Female 692.9093 733.2122

Male 740.9080 751.4900

b. Which gender has the highest mean salary?

Sol:- Rcmdr> with(RcmdrTestDrive, tapply(salary, list(gender), mean, na.rm=TRUE))

Female Male

698.0911 743.3915

Males are having highest mean salaries.

c. Report the highest mean salary.

**Sol :-** Highest mean salary according to gender is 743.3915.

Highest mean salary according to gender and smoking status is 751.49.

d. Compare the spreads for the genders by calculating the standard deviation of salary by gender.

Sol: - Rcmdr> with(RcmdrTestDrive, tapply(salary, list(gender), sd, na.rm=TRUE))

Female Male

130.7053 158.5423