**Assignment 8.1**

**1. Use the package RcmdrPlugin.IPSUR.**

**data(RcmdrTestDrive)**

**and perform the below operations**

1. **Calculate the average salary by gender and smoking status.**

**Ans:**

tapply(salary, list(gender=gender, smoking=smoking), mean)

smoking

gender Nonsmoker Smoker

Female 692.9093 733.2122

Male 740.9080 751.4900

1. **Which gender has the highest mean salary?**

**Ans**:

tapply(salary, list(gender=gender), max)

gender

Female Male

1025.09 1156.16

1. **Report the highest mean salary.**

Ans:

max(RcmdrTestDrive$salary)

[1] 1156.16

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

**Ans**:

tapply(salary, list(gender=gender), sd)

Gender

Female Male

130.7053 158.5423