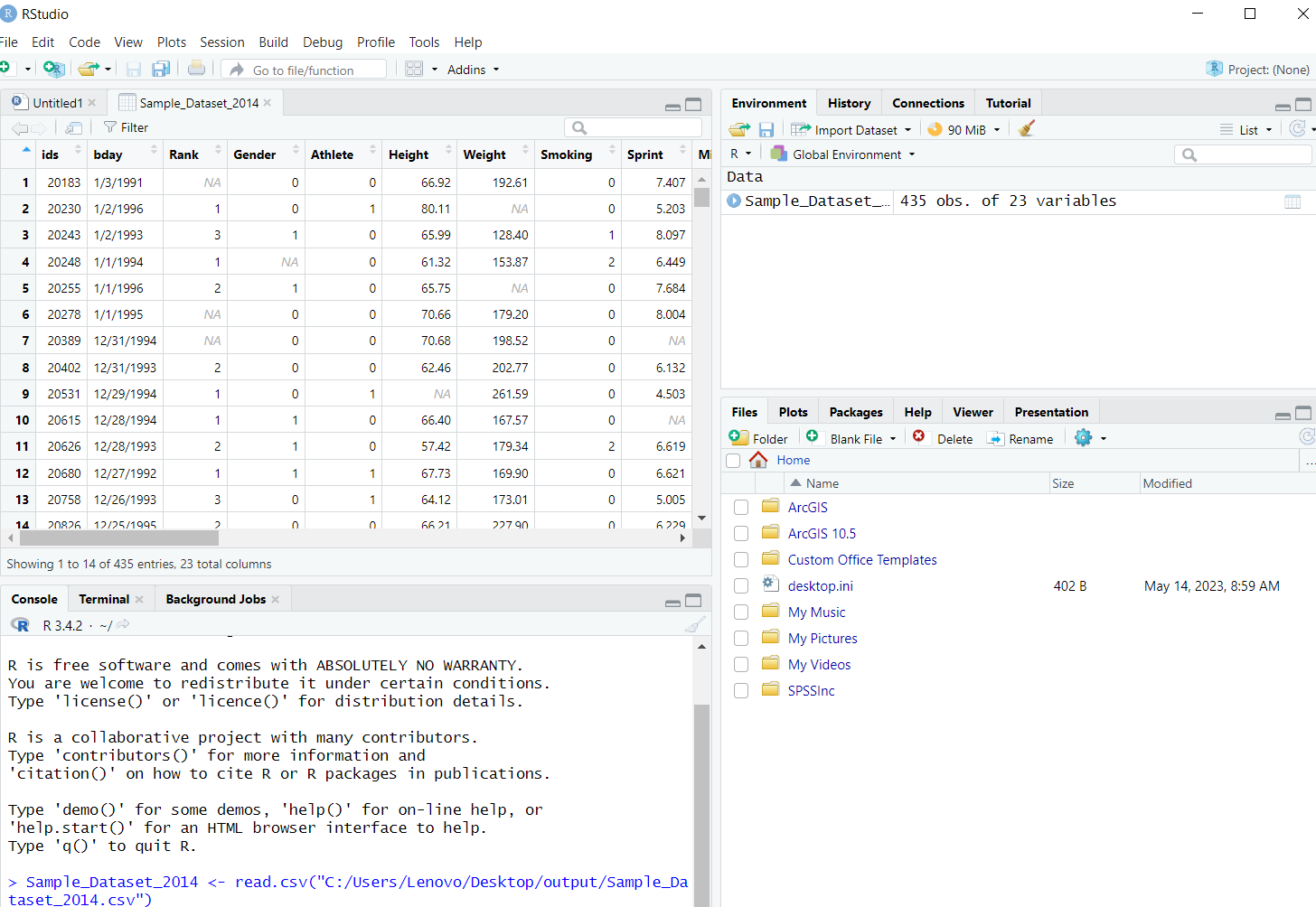
**R**

Dataset:

****

* **One Sample T-Test**

**Code:**

#One Sample T-Test

Sample\_Dataset\_2014 <- read.csv("C:/Users/Lenovo/Desktop/output/Sample\_Dataset\_2014.csv")

C:/Users/Lenovo/Desktop/output/Sample\_Dataset\_2014.csv

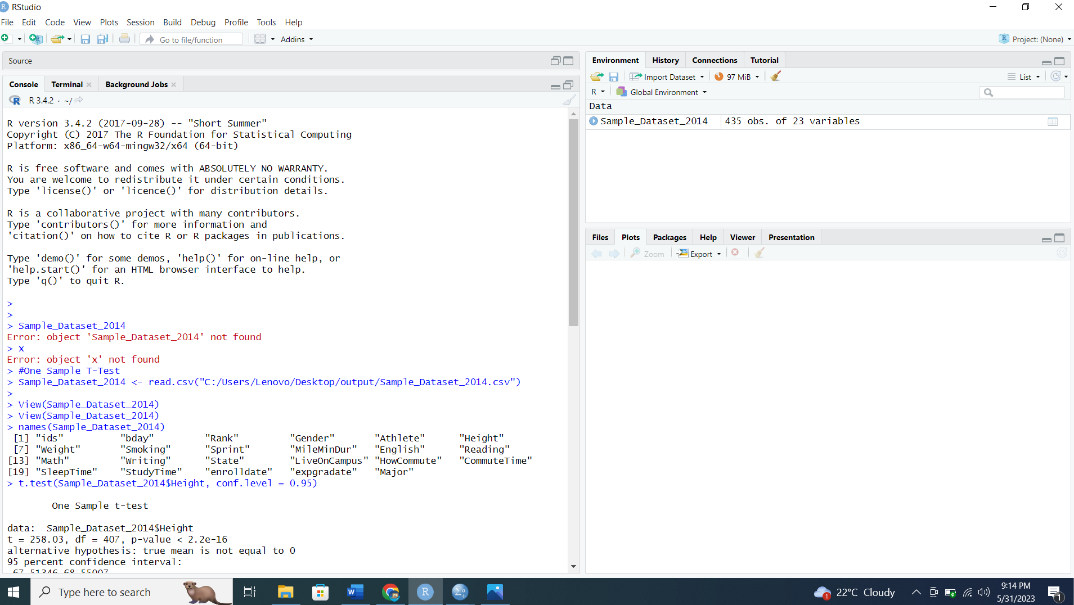
str(Sample\_Dataset\_2014)

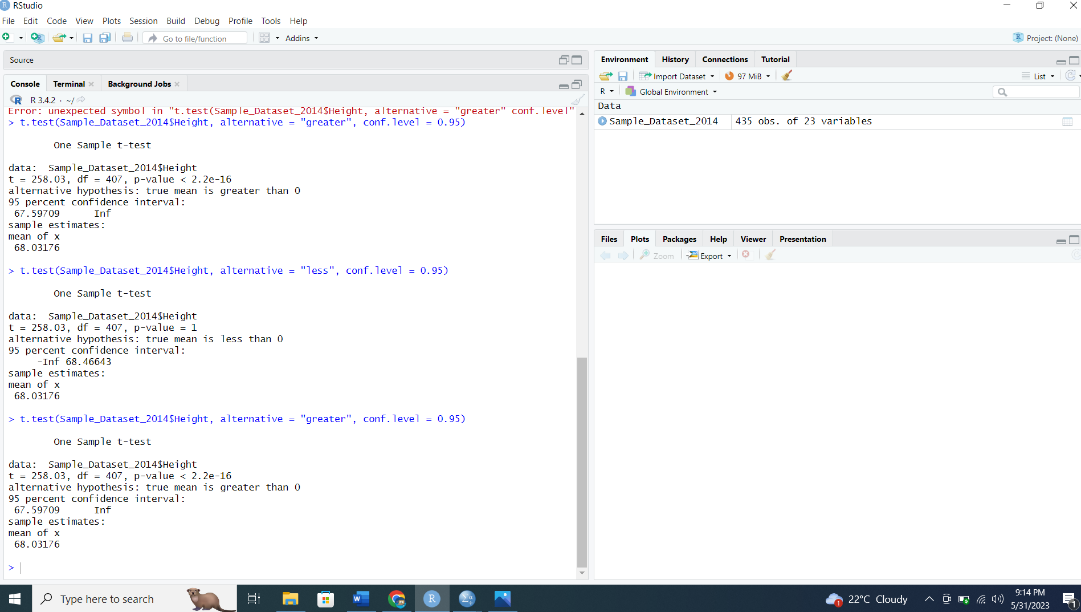
names(Sample\_Dataset\_2014)

t.test(Sample\_Dataset\_2014$Height, conf.level = 0.95)

t.test(Sample\_Dataset\_2014$Height, alternative = "greater", conf.level = 0.95)

**result:**





* **Paired Sample T-Test**

**Code:**

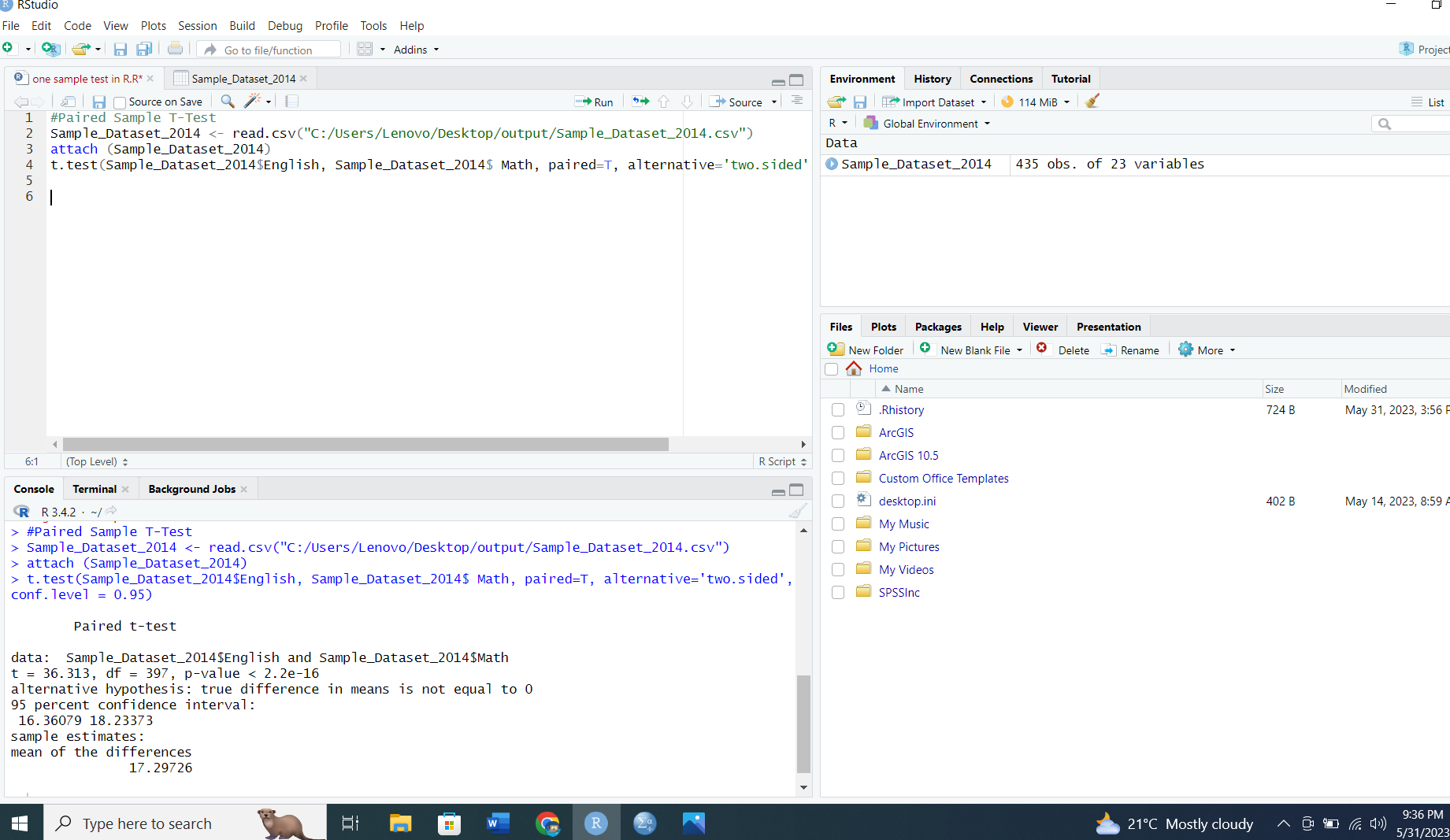
#Paired Sample T-Test

Sample\_Dataset\_2014 <- read.csv("C:/Users/Lenovo/Desktop/output/Sample\_Dataset\_2014.csv")

attach (Sample\_Dataset\_2014)

t.test(Sample\_Dataset\_2014$English, Sample\_Dataset\_2014$ Math, paired=T, alternative='two.sided', conf.level = 0.95)

**result:**

****

* **Independent Sample T-Test**

**Code:**

#Data for Independent Sample T-Test

Sample\_Dataset\_2014 <- read.csv("C:/Users/Lenovo/Desktop/output/Sample\_Dataset\_2014.csv")

attach (Sample\_Dataset\_2014)

View(Sample\_Dataset\_2014)

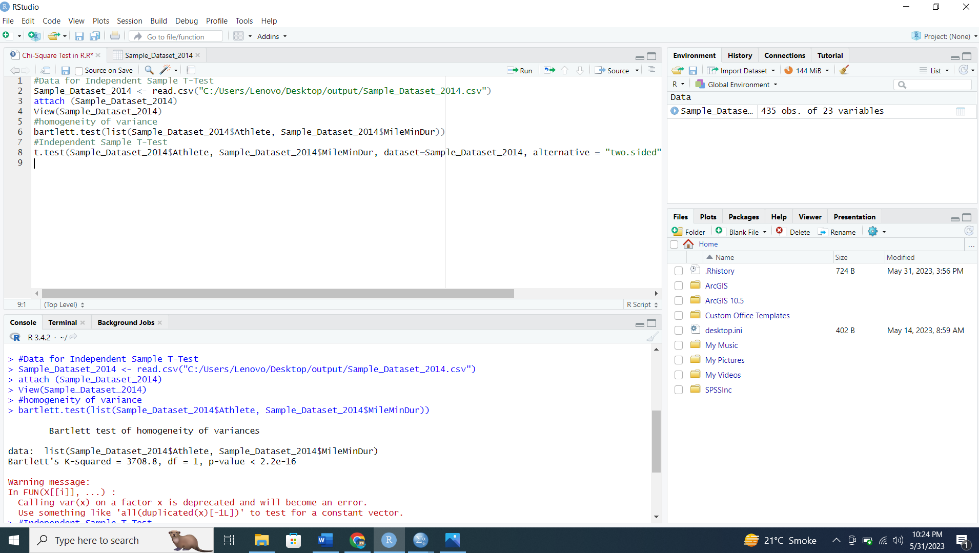
#homogeneity of variance

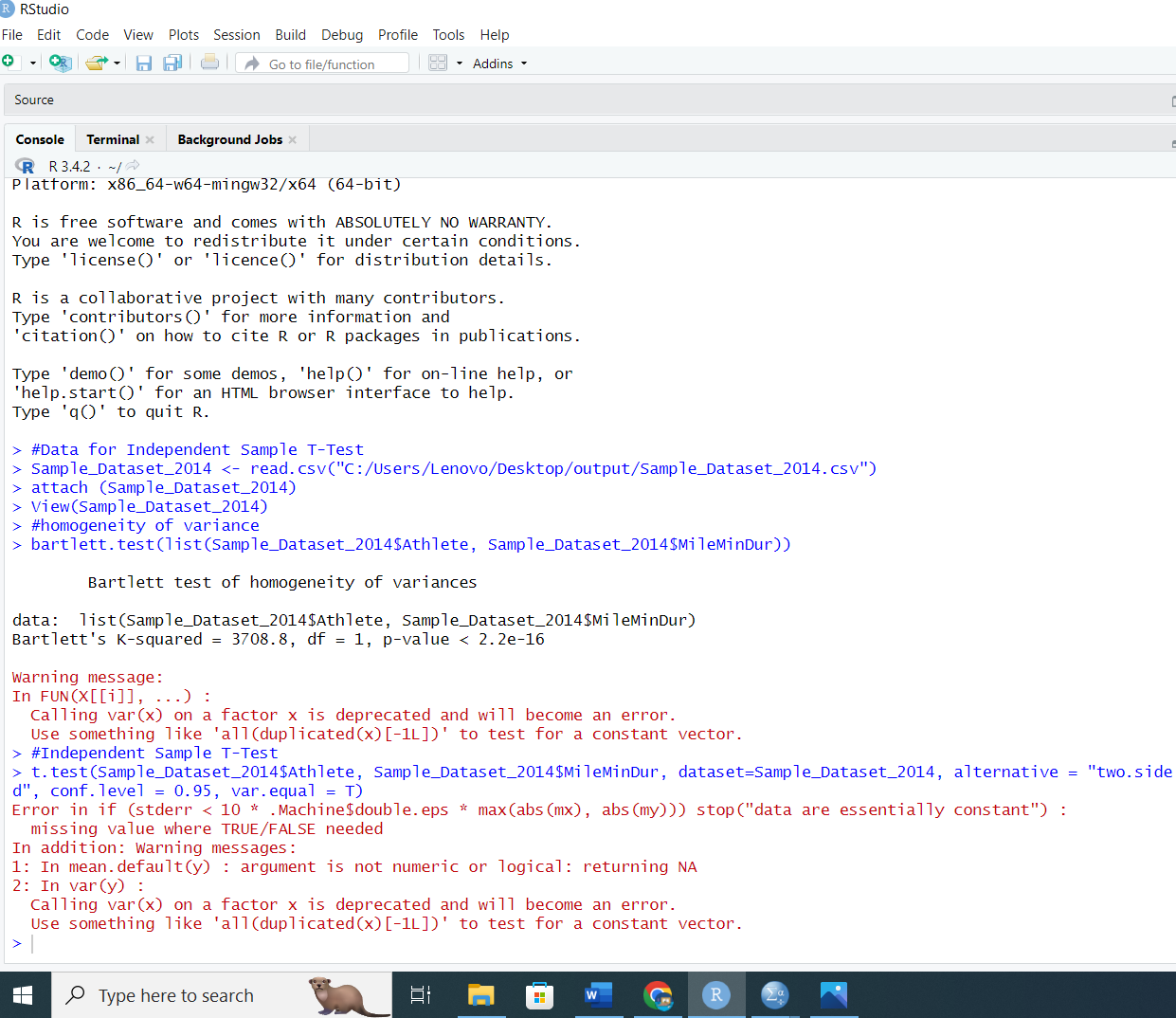
bartlett.test(list(Sample\_Dataset\_2014$Athlete, Sample\_Dataset\_2014$MileMinDur))

#Independent Sample T-Test

t.test(Sample\_Dataset\_2014$Athlete, Sample\_Dataset\_2014$MileMinDur, dataset=Sample\_Dataset\_2014, alternative = "two.sided", conf.level = 0.95, var.equal = T)

**Result:**

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* **ANOVA**

**Code:**

#ANOVA

Sample\_Dataset\_2014 <-read.csv("C:/Users/Lenovo/Desktop/output/Sample\_Dataset\_2014.csv")

attach (Sample\_Dataset\_2014)

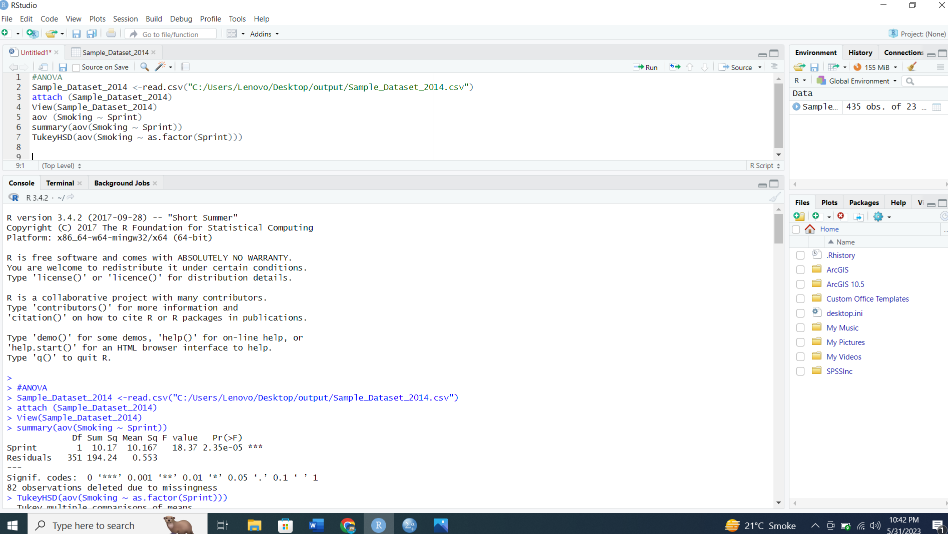
View(Sample\_Dataset\_2014)

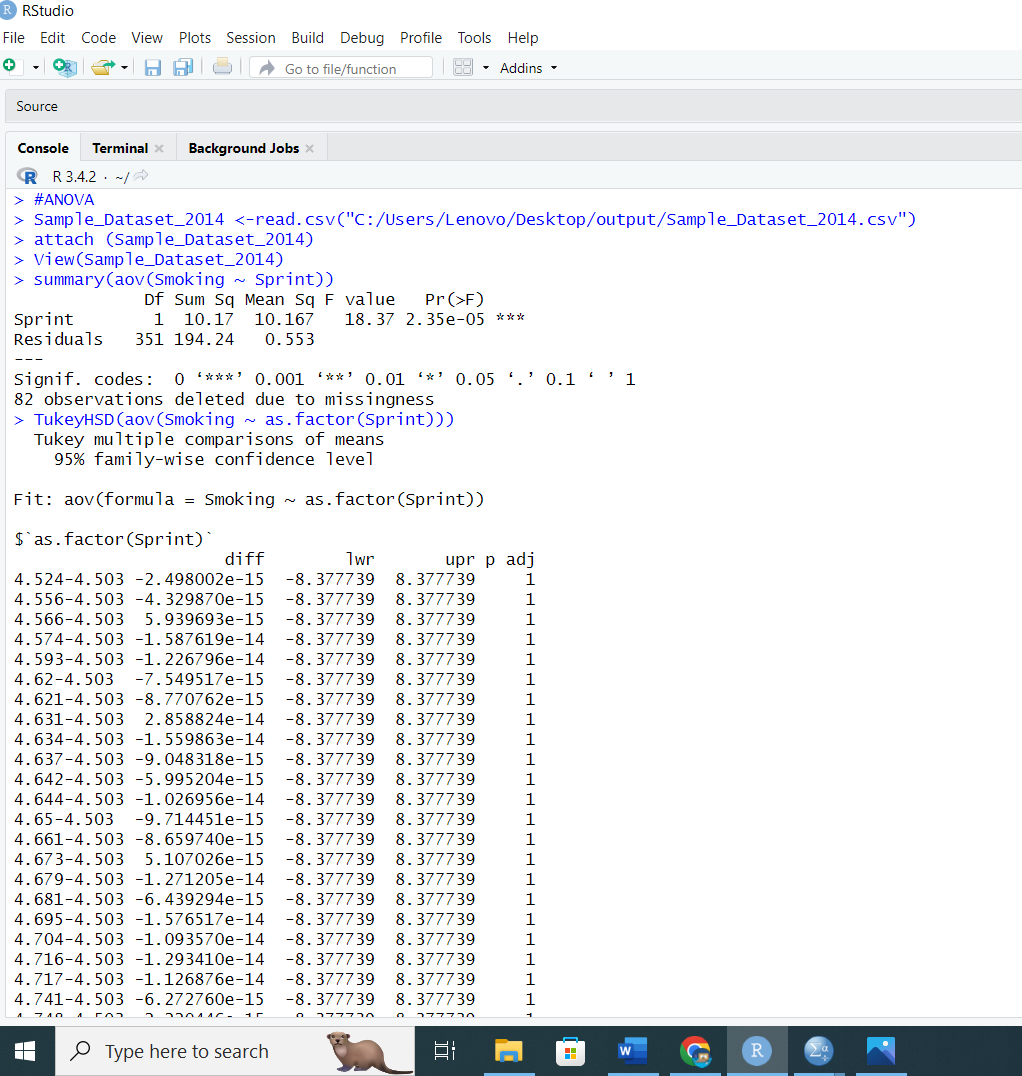
aov (Smoking ~ Sprint)

summary(aov(Smoking ~ Sprint))

TukeyHSD(aov(Smoking ~ as.factor(Sprint)))

**Results:**

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* **Pearson Correlation**

**Code:**

#Pearson Correlation

Sample\_Dataset\_2014 <-read.csv("C:/Users/Lenovo/Desktop/output/Sample\_Dataset\_2014.csv")

attach (Sample\_Dataset\_2014)

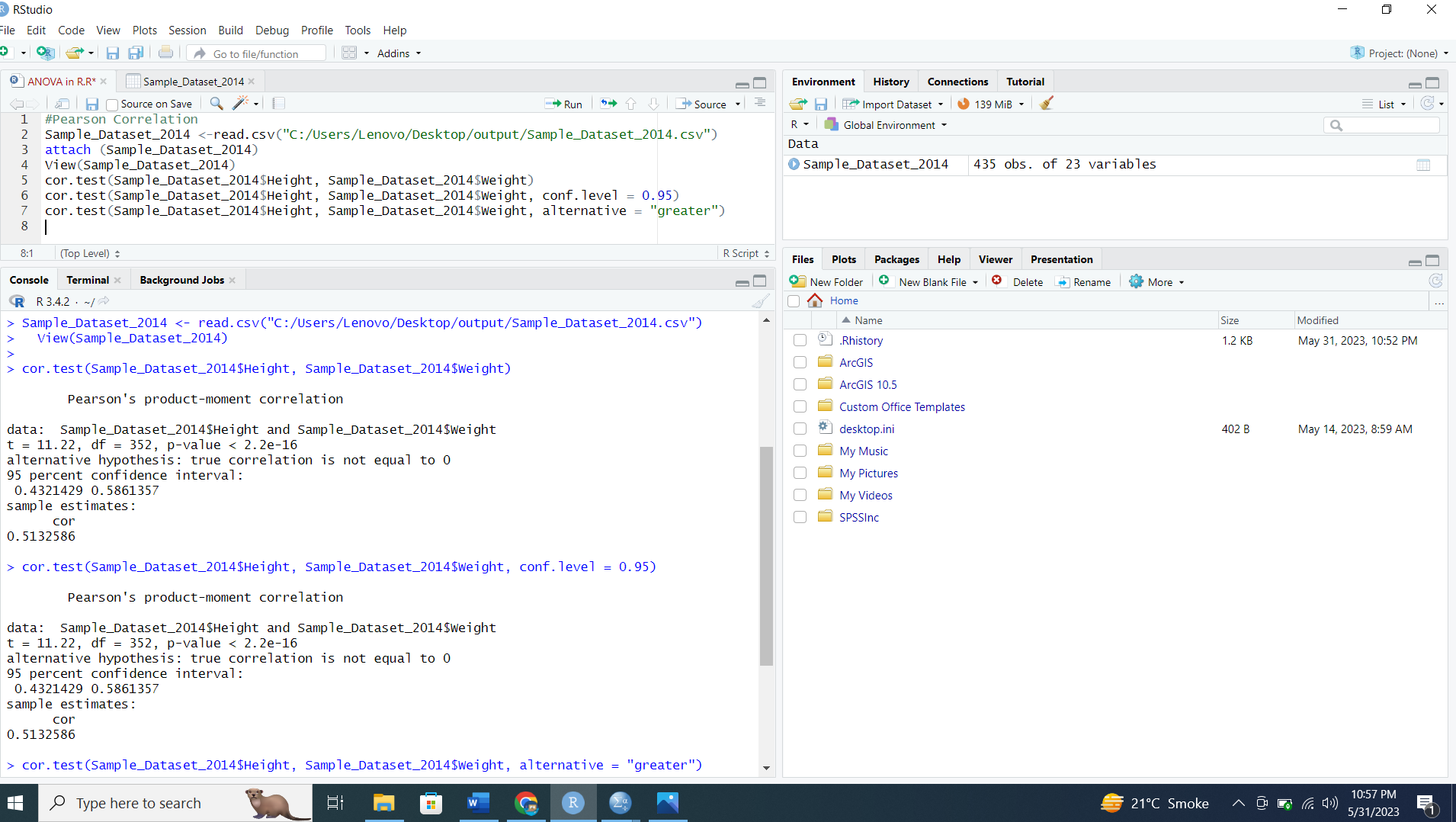
View(Sample\_Dataset\_2014)

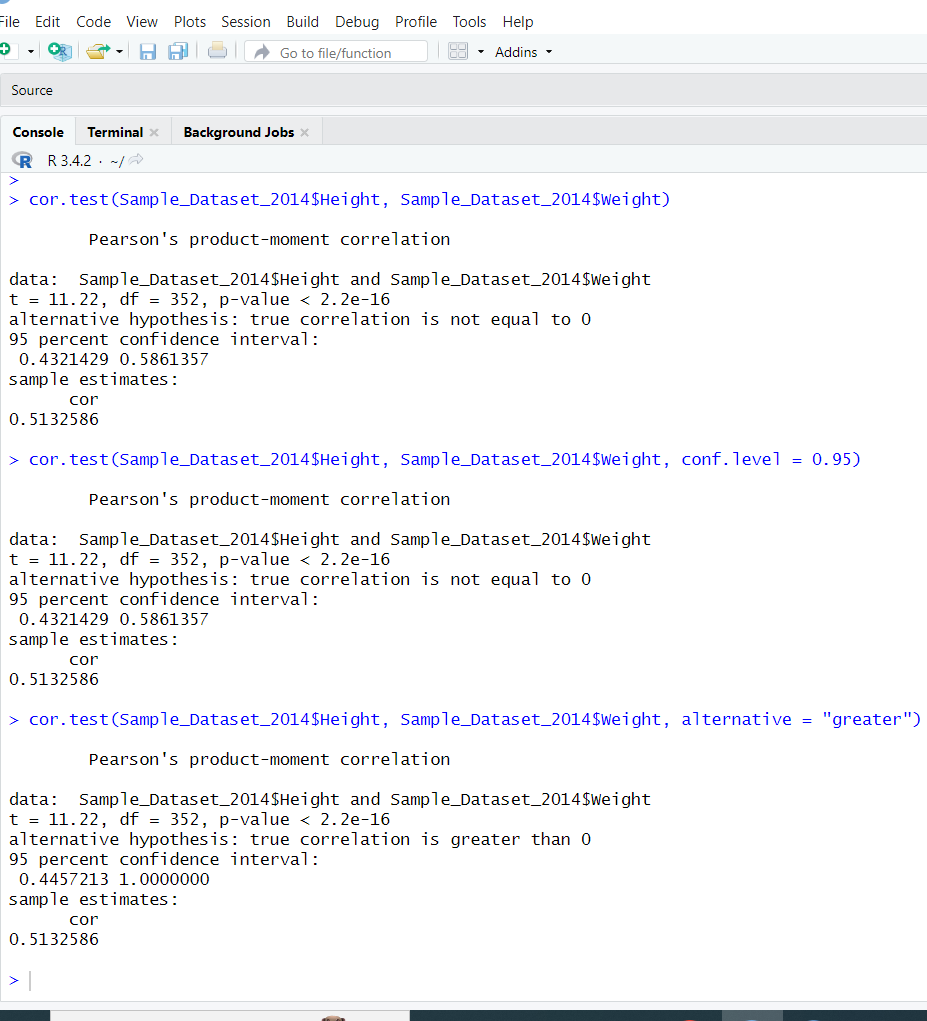
cor.test(Sample\_Dataset\_2014$Height, Sample\_Dataset\_2014$Weight)

cor.test(Sample\_Dataset\_2014$Height, Sample\_Dataset\_2014$Weight, conf.level = 0.95)

cor.test(Sample\_Dataset\_2014$Height, Sample\_Dataset\_2014$Weight, alternative = "greater")

**Results:**

****

****

* **Chi-Square Test**

**Code:**

#Chi-Square Test

Sample\_Dataset\_2014 <-read.csv("C:/Users/Lenovo/Desktop/output/Sample\_Dataset\_2014.csv")

attach (Sample\_Dataset\_2014)

View(Sample\_Dataset\_2014)

#contingency table

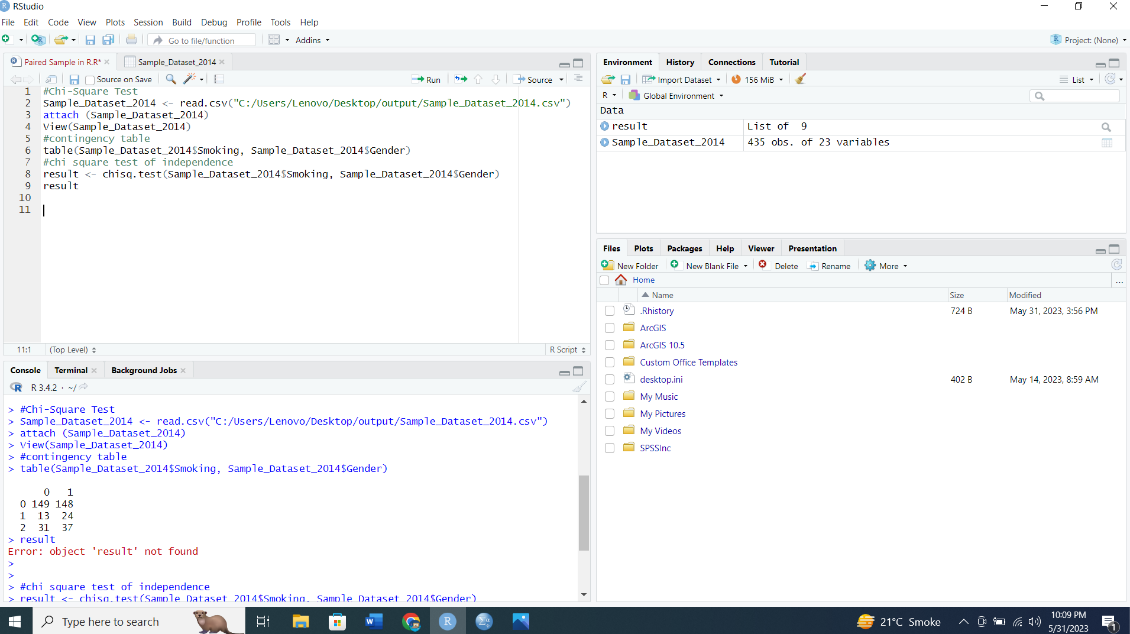
table(Sample\_Dataset\_2014$Smoking, Sample\_Dataset\_2014$Gender)

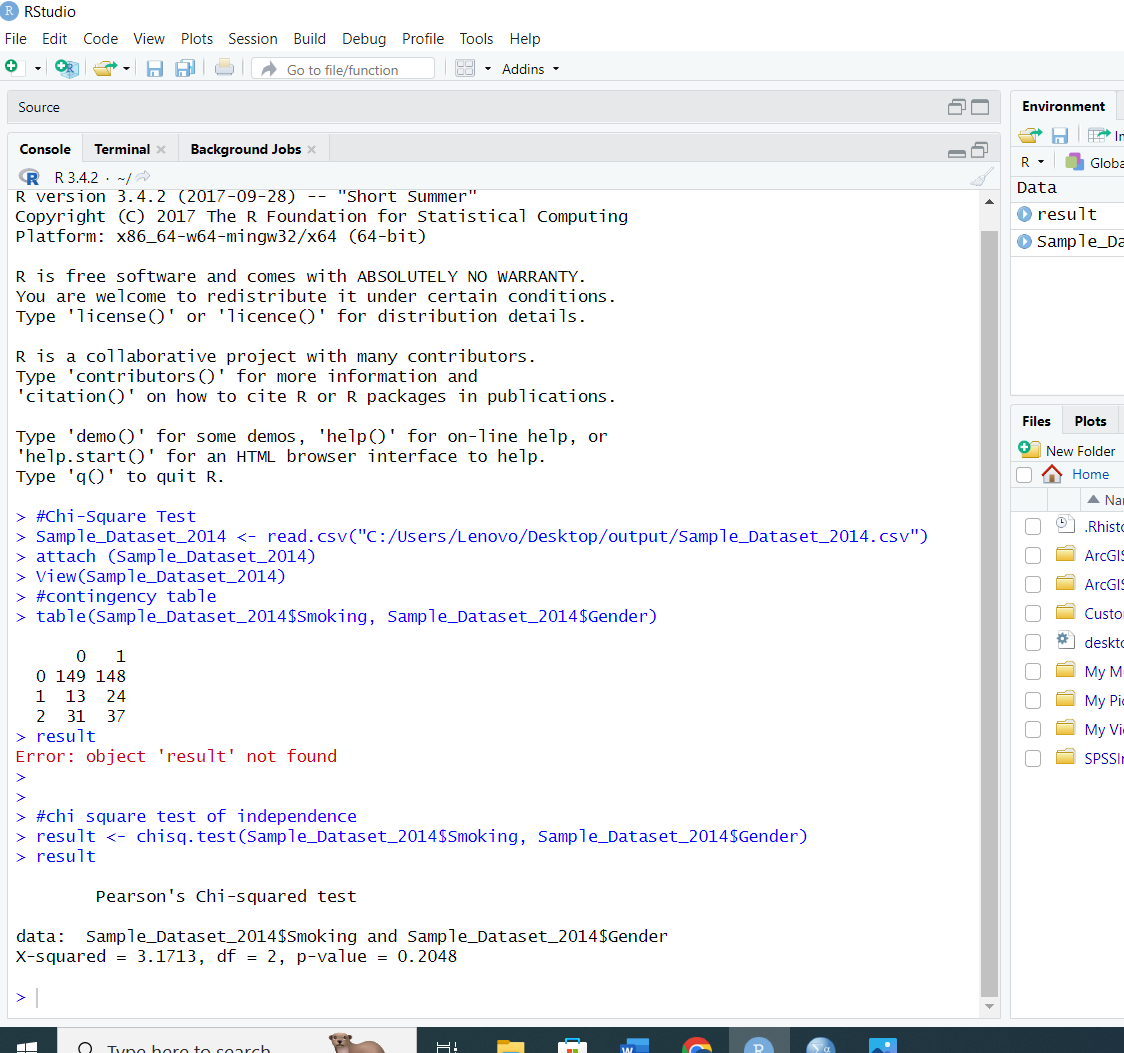
#chi square test of independence

result <- chisq.test(Sample\_Dataset\_2014$Smoking, Sample\_Dataset\_2014$Gender)

result

**Results:**

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****