```
#Univariate Plot
x = 2
print(x)
?plot

x = c(5,7,8,7,2,2,9,4,11,12,9,6)
plot(x)
plot(x,type = "l",main = "First Graph",
sub = "first subtitle",xlab = "X-axis",
ylab = "Y-axis")

iris
View(iris)

plot(iris$Sepal.Length,main = "Graph of Sepal Length of iris data")

mtcars
View(mtcars)#Viewing data
?mtcars#data description
names(mtcars)#column names
str(mtcars)#variable types
dim(mtcars)#dimension of data
plot(mtcars$mpg)

#Bivariate Scatter Plot
x <- c(5,7,8,7,2,2,9,4,11,12,9,6)
y <- c(99,86,87,88,111,103,87,94,78,77,85,86)

plot(x, y, main="Observation of Cars", xlab="Car age", ylab="Car speed")
abline(lm(y~x),col = 'red')

cor(x,y, method = "pearson")#correlation
cor(x,y, method = "spearman")#correlation

#Regression
#One Variable
model = lm(y~x)
summary(model)
format(1.387e-05,scientific = FALSE)

#Two Variable
model1 = lm(Petal.Length~Sepal.Width+Sepal.Length,data = iris)
model1
```

```
summary(model1)

# load the MASS package
install.packages("MASS")
library(MASS)
print(str(survey))

# Create a data frame from the main data set.
stu_data = data.frame(survey$Smoke,survey$Exer)

# Create a contingency table with the needed variables.
stu_data = table(survey$Smoke,survey$Exer)

print(stu_data)

# applying chisq.test() function
print(chisq.test(stu_data))

#### qqplot ####
# Set seed for reproducibility
set.seed(121)

# Create random normally distributed values
x <- rnorm(1200)

# QQplot of normally distributed values
qqnorm(x)

# Add qqline to plot
qqline(x, col = "darkgreen")

qqnorm(iris$Sepal.Length)

# Add qqline to plot
qqline(iris$Sepal.Length, col = "darkgreen")

?qqnorm
```