

```
rainfall <- c(1234,12345,567,3457,7890,234)
rainfall.timeseries <- ts(rainfall,start = c(2012,1),frequency=12)
print(rainfall.timeseries)
png(file=rainfall.png)
dev.off()
plot(rainfall.timeseries)
```

```
install.packages("party")
library(party)
print(head(readingSkills))

input.dat <- readingSkills[c(1:105),]
png(file = "decision_tree.png")
output.tree <- ctree(
  nativeSpeaker~age + shoeSize + score, data = input.dat)
plot(output.tree)
dev.off()
```

```
data(iris)
str(iris)
k <- 3
set.seed(123)
iris_kmeans <- kmeans(iris[, -5], centers = k, nstart = 20)
iris_kmeans$cluster
iris_kmeans$centers
plot(iris[, c(1, 2)], col = iris_kmeans$cluster,
main = "K-means Clustering of Iris Dataset",
xlab = "Sepal Length", ylab = "Sepal Width")
points(iris_kmeans$centers[, c(1, 2)], col = 1:k, pch = 8, cex = 2)
legend("topright", legend=paste("Cluster", 1:k), col = 1:k, pch = 8)
```