after\_dropping\_features\_to\_corelate <- project\_dataset[, -which(names(project\_dataset) == "diagnosis")]

cr\_ov <- cor(after\_dropping\_features\_to\_corelate)

print(cr\_ov)

png(file = "/Users/sakif/Desktop/R/ds\_project\_ft/overview\_corelation\_after\_dropping.png")

corrplot(cr\_ov)

dev.off()

features\_to\_corelate <- project\_dataset[, -which(names(project\_dataset) == "diagnosis")]

cr\_ov <- cor(features\_to\_corelate)

print(cr\_ov)

png(file = "/Users/sakif/Desktop/R/ds\_project\_ft/overview\_corelation.png")

corrplot(cr\_ov)

dev.off()

k <- 2

features <- project\_dataset[, -which(names(project\_dataset) == "diagnosis")]

kmeans\_result <- kmeans(features, centers = k)

cluster\_assignments <- kmeans\_result$cluster

cluster\_centers <- kmeans\_result$centers

within\_cluster\_sum\_of\_squares <- kmeans\_result$tot.withinss

project\_dataset$cluster <- factor(cluster\_assignments)

png(file = "/Users/sakif/Desktop/R/ds\_project\_ft/k-means\_scatter.png")

ggplot(project\_dataset, aes(x = project\_dataset$radius\_mean, y = project\_dataset$texture\_mean, color = project\_dataset$cluster)) +

geom\_point()

dev.off()

confusion\_matrix <- table(Actual = test\_target, Predicted = predicted\_labels)

print(confusion\_matrix)