Assignment 2

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library(readxl)  
library(dplyr)

##   
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':  
##   
## filter, lag

## The following objects are masked from 'package:base':  
##   
## intersect, setdiff, setequal, union

library(caret)

## Loading required package: ggplot2

## Loading required package: lattice

library(class)

library(readxl)  
UniversalBank <- read\_excel("C:/Users/jacob/Downloads/UniversalBank.xlsx")  
View(UniversalBank)

UniversalBank <- UniversalBank %>% select(-ID, -ZIPCode)

UniversalBank$Education <- as.factor(UniversalBank$Education)

dummy\_model <- dummyVars("~.", data = UniversalBank)  
UniversalBank\_dummy <- data.frame(predict(dummy\_model, newdata = UniversalBank))

set.seed(123)  
train\_index <- createDataPartition(UniversalBank\_dummy$PersonalLoan, p = 0.6, list = FALSE)  
train\_data <- UniversalBank\_dummy[train\_index, ]  
test\_data <- UniversalBank\_dummy[-train\_index, ]

new\_customer <- data.frame(  
 Age = 40,  
 Experience = 10,  
 Income = 84,  
 Family = 2,  
 CCAvg = 2,  
 Mortgage = 0,  
 Securities.Account = 0,  
 CD.Account = 0,  
 Online = 1,  
 CreditCard = 1,  
 Education\_1 = 0,  
 Education\_2 = 1,  
 Education\_3 = 0  
)

# Tried running the Knn but was unsure / not confident in what to do next, I deeply apologize for not being able to complete the assignmet