PROJECT CLV

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1 to know the annual spent, i took the average purchase amount per visit multiplied per 3 that is the number that you go per week then multiplied per 52

The 52 represent the number of weeks in a year,i used it based on the average purchase amount and the number of visits per week

Then with the annual spent i multiple it per the customer lifetime

2

INPUT:# Define variables

customer\_start\_date <- as.Date("2020-01-01") # Customer start date

customer\_lifetime <- as.numeric(difftime(Sys.Date(), customer\_start\_date, units = "days"))/365 # Customer lifetime in years

avg\_purchase\_amount <- 6.45 # Average purchase amount

visits\_per\_week <- 3 # Number of visits per week

profit\_margin <- 0.25 # Profit margin as a decimal

# Calculate CLV

annual\_spend <- avg\_purchase\_amount \* visits\_per\_week \* 52 # Annual spending at Tim Hortons

annual\_profit <- annual\_spend \* profit\_margin # Annual profit at 25% profit margin

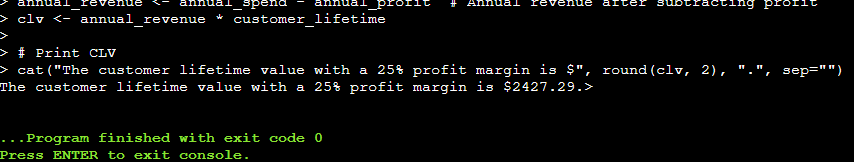
annual\_revenue <- annual\_spend - annual\_profit # Annual revenue after subtracting profit

clv <- annual\_revenue \* customer\_lifetime

# Print CLV

cat("The customer lifetime value with a 25% profit margin is $", round(clv, 2), ".", sep="")

OUTPUT:



3 INPUT:

# Define variables

customer\_start\_date <- as.Date("2020-01-01") # Customer start date

customer\_lifetime <- 2 # Customer lifetime in years

total\_spending <- 2000 # Total spending over 2 years

visits\_per\_week <- 3 # Number of visits per week

avg\_purchase\_amount <- total\_spending / (visits\_per\_week \* 52 \* customer\_lifetime) # Calculate average purchase amount

profit\_margin <- 0.25 # Profit margin as a decimal

# Calculate CLV

annual\_spend <- avg\_purchase\_amount \* visits\_per\_week \* 52 # Annual spending at Tim Hortons

annual\_profit <- annual\_spend \* profit\_margin # Annual profit at 25% profit margin

annual\_revenue <- annual\_spend - annual\_profit # Annual revenue after subtracting profit

clv <- annual\_revenue \* customer\_lifetime

# Print CLV

cat("The customer lifetime value is $", round(clv, 2), ".", sep="")

4 INPUT:

# Define variables

customer\_start\_date <- as.Date("2020-01-01") # Customer start date

customer\_lifetime <- as.numeric(difftime(Sys.Date(), customer\_start\_date, units = "days"))/365 # Customer lifetime in years

avg\_purchase\_amount <- 6.45 # Average purchase amount

visits\_per\_week <- 3 # Number of visits per week

# Calculate CLV

annual\_spend <- avg\_purchase\_amount \* visits\_per\_week \* 52 # Annual spending at Tim Hortons

clv <- annual\_spend \* customer\_lifetime

# Print CLV

cat("The customer lifetime value is $", round(clv, 2), ".", sep="")

OUTPUT:

