

RWorksheet_Delgado#3b.Rmd

Clyde Marcelo Delgado

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```
df <- data.frame( Respondent = 1:5, Sex = c("Male", "Female", "Female", "Male", "Male"), Fa-
thers_Occupation = c("Farmer", "Driver", "Others", "Farmer", "Others"), Siblings_Attending_School =
c(4, 2, 5, 3, 6), Types_of_Houses = c("Wood", "Concrete", "Semi-Concrete", "Wood", "Concrete") )

print("Data Structure:") print(str(df)) print("Data Summary:") print(summary(df))

mean_siblings <- mean(df$Siblings_Attending_School) print(paste("Is the mean number of siblings attending
5?", mean_siblings == 5))

subset_df_1 <- df[1:2, ] print("First two rows:") print(subset_df_1)

subset_df_2 <- df[c(3, 5), c(2, 4)] print("3rd and 5th row with 2nd and 4th columns:") print(subset_df_2)

types_houses <- df$Types_of_Houses print("Types of Houses:") print(types_houses)

male_farmers <- subset(df, Sex == "Male" & Fathers_Occupation == "Farmer") print("Male respondents
whose father is a farmer:") print(male_farmers)

female_siblings <- subset(df, Sex == "Female" & Siblings_Attending_School >= 5) print("Female respon-
dents with >= 5 siblings attending school:") print(female_siblings)

df_empty <- data.frame( Ints = integer(), Doubles = double(), Characters = character(), Logicals = logical(),
Factors = factor(), stringsAsFactors = FALSE )

print("Structure of the empty dataframe:") print(str(df_empty))

write.csv(df, file = "HouseholdData.csv", row.names = FALSE)

df_imported <- read.csv("HouseholdData.csv") print("Imported CSV Data:") print(df_imported)

df_imported$Sex <- factor(df_imported$Sex, levels = c("Male", "Female"), labels = c(1, 2)) print("Converted
Sex to factor (1 = Male, 2 = Female):") print(df_imported)

df_imported$Types_of_Houses <- factor(df_imported$Types_of_Houses, levels = c("Wood", "Concrete",
"Semi-Concrete"), labels = c(1, 2, 3)) print("Converted Types of Houses to factor:") print(df_imported)

df_imported$Fathers_Occupation <- factor(df_imported$Fathers_Occupation, levels = c("Farmer", "Driver",
"Others"), labels = c(1, 2, 3)) print("Converted Father's Occupation to factor:") print(df_imported)

female_driver <- subset(df_imported, Sex == 2 & Fathers_Occupation == 2) print("Female respondents
whose father's occupation is Driver:") print(female_driver)

siblings_5plus <- subset(df_imported, Siblings_Attending_School >= 5) print("Respondents with >= 5
siblings attending school:") print(siblings_5plus)
```