RGui - [R Console]

File Edit View Misc Packages Windows Help

```
>
> # Define the data frame
> df <- data.frame(X1 = c(1, 2, 3), X2 = c("Alice", "Bob", "Charlie"), X3 = c(25, NA, 30))
>
> # Rename the columns
> colnames(df) <- c("ID", "Name", "Age")
>
> print("Data Frame with Renamed Columns:")
[1] "Data Frame with Renamed Columns:"
> print(df)
  ID    Name Age
1  1   Alice  25
2  2     Bob  NA
3  3 Charlie  30
> # Calculate the mean of the Age column, excluding NA values
> mean_age <- mean(df$Age, na.rm = TRUE)
>
> # Replace NA values with the mean
> df$Age[is.na(df$Age)] <- mean_age
>
> print("Data Frame after Replacing Missing Age Values:")
[1] "Data Frame after Replacing Missing Age Values:"
> print(df)
  ID    Name  Age
1  1   Alice 25.0
2  2     Bob 27.5
3  3 Charlie 30.0
> # Sort by Age in descending order
> df_sorted <- df[order(-df$Age), ]
>
> print("Data Frame Sorted by Age (Descending):")
[1] "Data Frame Sorted by Age (Descending):"
> print(df_sorted)
  ID    Name  Age
3  3 Charlie 30.0
2  2     Bob 27.5
1  1   Alice 25.0
> # Remove the ID column
> df_sorted <- df_sorted[ , -which(names(df_sorted) == "ID")]
>
> print("Data Frame after Removing ID Column:")
[1] "Data Frame after Removing ID Column:"
> print(df_sorted)
    Name  Age
```

```
3 Charlie 30.0
2     Bob 27.5
1   Alice 25.0
> # Subset the data
> df_subset <- subset(df_sorted, Age >= 40)
>
> print("Subset of Data Frame where Age >= 40:")
[1] "Subset of Data Frame where Age >= 40:"
> print(df_subset)
[1] Name Age
<0 rows> (or 0-length row.names)
> print(df_subset)
```