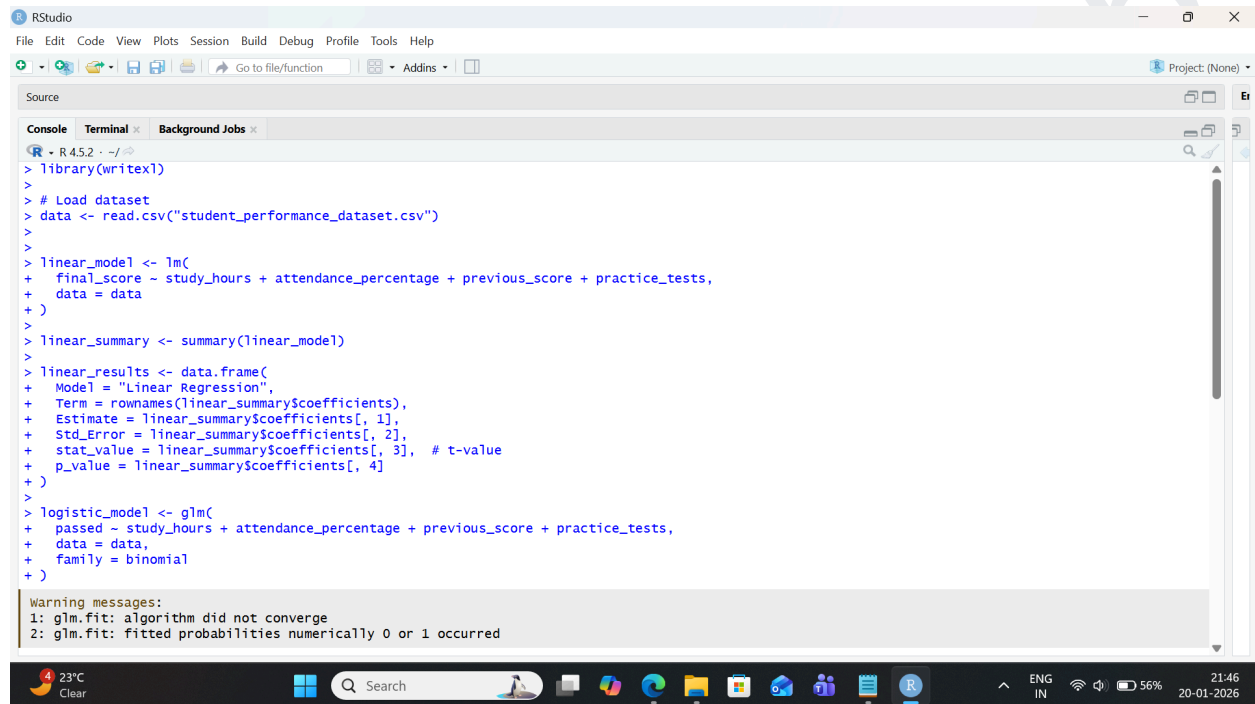


Practical No 15 Module II

Aim : Exporting results into external files (Excel, CSV, PDF) using write.csv() and writexl (R).

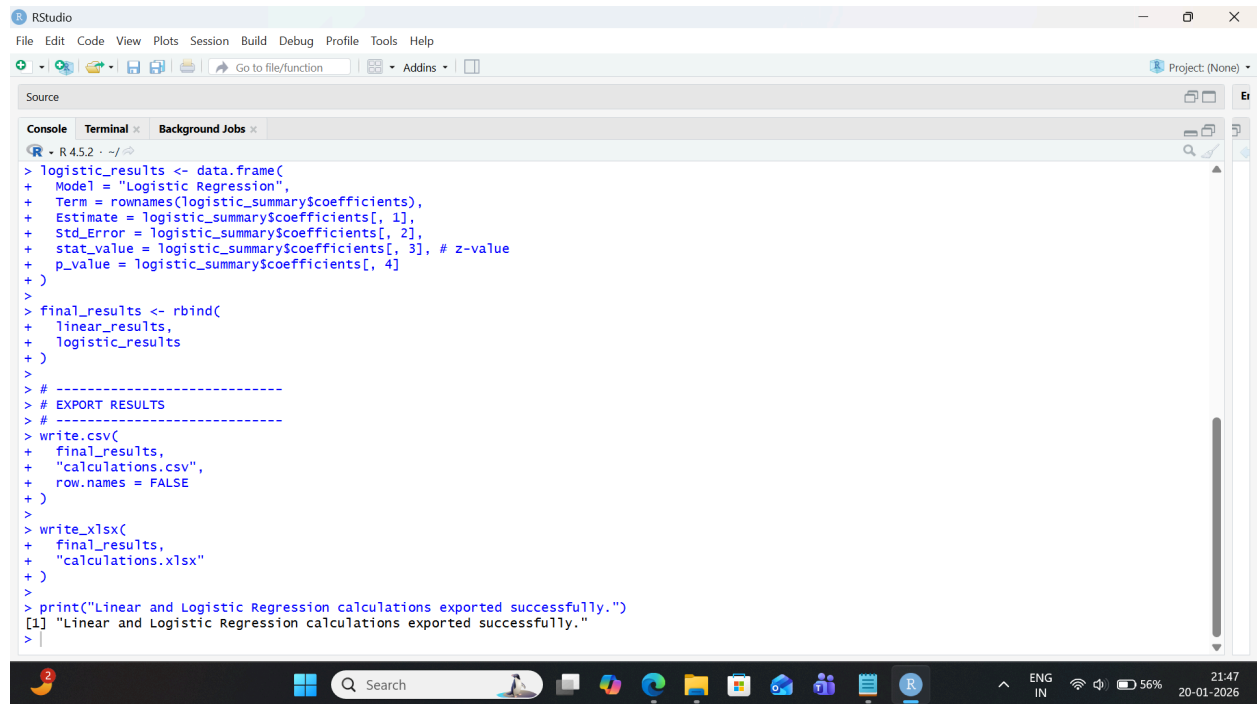
Output :



```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs x
R 4.5.2 - ~/
> library(writexl)
>
> # Load dataset
> data <- read.csv("student_performance_dataset.csv")
>
> linear_model <- lm(
+   final_score ~ study_hours + attendance_percentage + previous_score + practice_tests,
+   data = data
+ )
> linear_summary <- summary(linear_model)
>
> linear_results <- data.frame(
+   Model = "Linear Regression",
+   Term = rownames(linear_summary$coefficients),
+   Estimate = linear_summary$coefficients[, 1],
+   Std_Error = linear_summary$coefficients[, 2],
+   stat_value = linear_summary$coefficients[, 3], # t-value
+   p_value = linear_summary$coefficients[, 4]
+ )
>
> logistic_model <- glm(
+   passed ~ study_hours + attendance_percentage + previous_score + practice_tests,
+   data = data,
+   family = binomial
+ )
Warning messages:
1: glm.fit: algorithm did not converge
2: glm.fit: fitted probabilities numerically 0 or 1 occurred
```

SHETH L.U.J. AND SIR M.V. COLLEGE OF ARTS SCIENCE AND COMMERCE

SUBJECT : R Programming



The screenshot shows the RStudio interface with the console pane active. The code in the console performs the following steps: 1. Creates a data frame 'logistic_results' with columns: Model ('Logistic Regression'), Term (rownames of logistic_summary\$coefficients), Estimate (logistic_summary\$coefficients[, 1]), Std_Error (logistic_summary\$coefficients[, 2]), stat_value (logistic_summary\$coefficients[, 3]), and p_value (logistic_summary\$coefficients[, 4]). 2. Combines 'logistic_results' with 'linear_results' into 'final_results' using rbind(). 3. Prints a separator line '-----' and the text 'EXPORT RESULTS'. 4. Writes 'final_results' to a CSV file 'calculations.csv' using write.csv(). 5. Writes 'final_results' to an Excel file 'calculations.xlsx' using write.xlsx(). 6. Prints a success message: 'Linear and Logistic Regression calculations exported successfully.'

```
> logistic_results <- data.frame(  
+   Model = "Logistic Regression",  
+   Term = rownames(logistic_summary$coefficients),  
+   Estimate = logistic_summary$coefficients[, 1],  
+   Std_Error = logistic_summary$coefficients[, 2],  
+   stat_value = logistic_summary$coefficients[, 3], # z-value  
+   p_value = logistic_summary$coefficients[, 4]  
+ )  
>  
> final_results <- rbind(  
+   linear_results,  
+   logistic_results  
+ )  
>  
> # -----  
> # EXPORT RESULTS  
> # -----  
> write.csv(  
+   final_results,  
+   "calculations.csv",  
+   row.names = FALSE  
+ )  
>  
> write.xlsx(  
+   final_results,  
+   "calculations.xlsx"  
+ )  
>  
> print("Linear and Logistic Regression calculations exported successfully.")  
[1] "Linear and Logistic Regression calculations exported successfully."  
>
```

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