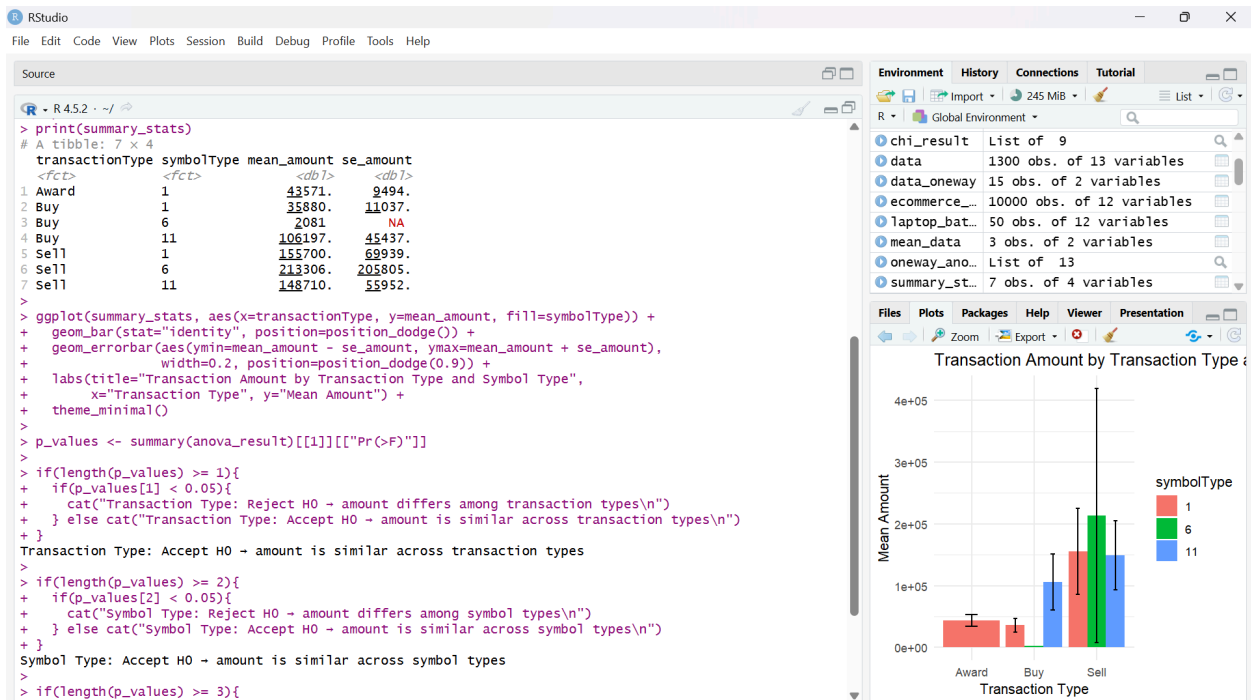
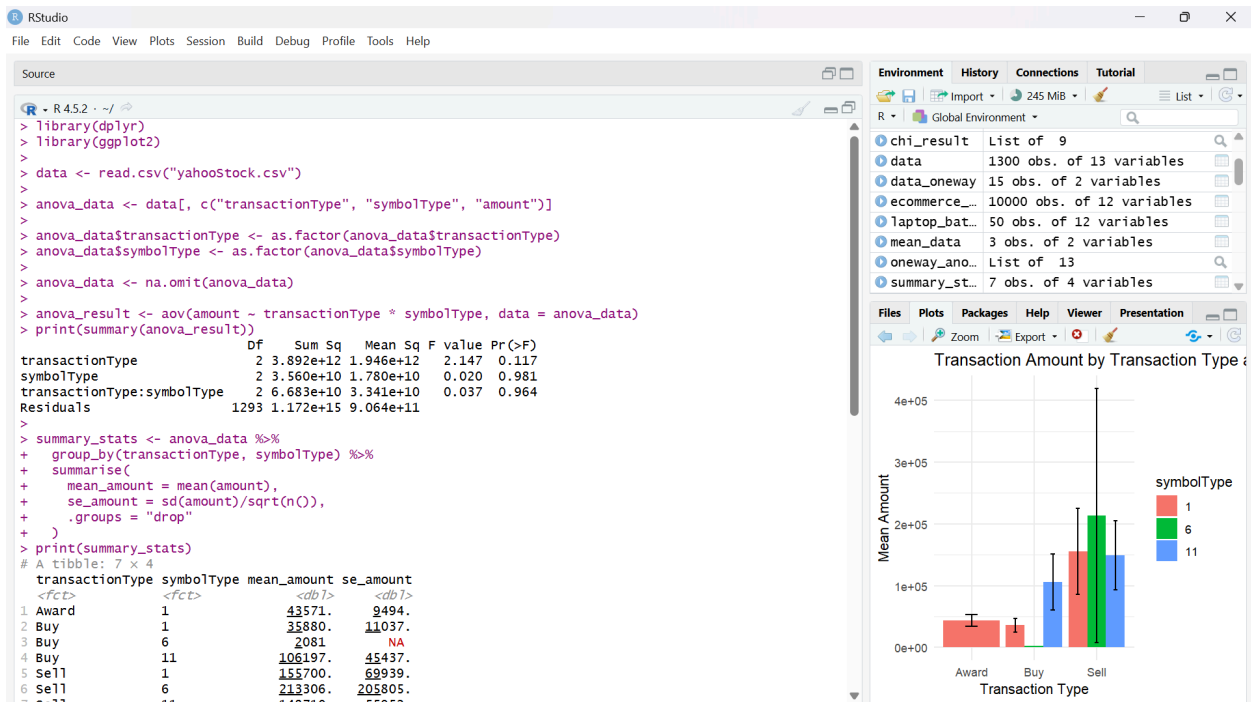


Sheth I.u.j. And sir m.v. college of arts science and commerce

Practical no. 8 mod2

Aim: Performing two-way ANOVA using aov() (R).



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RStudio

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```
Source
R - R4.5.2 - ~/
6 Sell 6 213306. 205805.
7 Sell 11 148710. 55952.
>
> ggplot(summary_stats, aes(x=transactionType, y=mean_amount, fill=symbolType)) +
+ geom_bar(stat="identity", position=position_dodge()) +
+ geom_errorbar(aes(ymin=mean_amount - se_amount, ymax=mean_amount + se_amount),
+ width=0.2, position=position_dodge(0.9)) +
+ labs(title="Transaction Amount by Transaction Type and Symbol Type",
+ x="Transaction Type", y="Mean Amount") +
+ theme_minimal()
>
> p_values <- summary(anova_result)[[1]][["Pr(>F)"]]
>
> if(length(p_values) >= 1){
+ if(p_values[1] < 0.05){
+ cat("Transaction Type: Reject H0 - amount differs among transaction types\n")
+ } else cat("Transaction Type: Accept H0 - amount is similar across transaction types\n")
+ }
Transaction Type: Accept H0 - amount is similar across transaction types
>
> if(length(p_values) >= 2){
+ if(p_values[2] < 0.05){
+ cat("Symbol Type: Reject H0 - amount differs among symbol types\n")
+ } else cat("Symbol Type: Accept H0 - amount is similar across symbol types\n")
+ }
Symbol Type: Accept H0 - amount is similar across symbol types
>
> if(length(p_values) >= 3){
+ if(p_values[3] < 0.05){
+ cat("Interaction: Reject H0 - interaction exists between transaction type and symbol type\n")
+ } else cat("Interaction: Accept H0 - no significant interaction\n")
+ }
Interaction: Accept H0 - no significant interaction
>
> print("simran s113")
[1] "simran s113"
> |
```

Environment

R - R4.5.2 - ~/

- chi_resu
- data
- data_one
- ecommerc
- laptop_b
- mean_dat
- oneway_a
- summary_

Files Plots

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Mean Amount

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Transaction Amount by Transaction Type &

