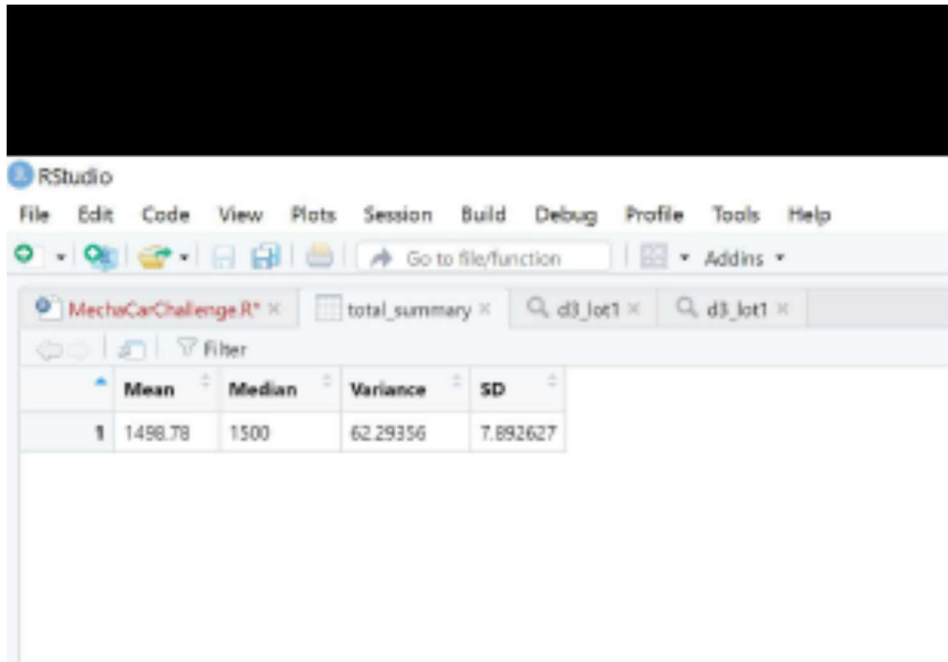


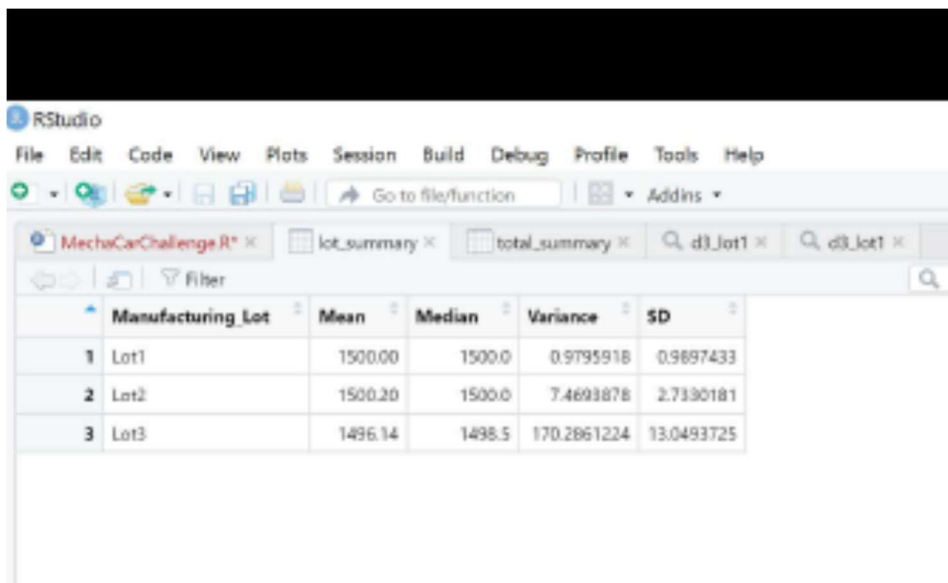
Deliverable 2 – Summary for Entire Dataset



The screenshot shows the RStudio interface with the 'MechaCarChallenge.R' script open. The 'total_summary' tab is active, displaying a summary table for the entire dataset. The table has four columns: Mean, Median, Variance, and SD. The first row shows the summary for the entire dataset.

	Mean	Median	Variance	SD
1	1498.78	1500	62.29356	7.892627

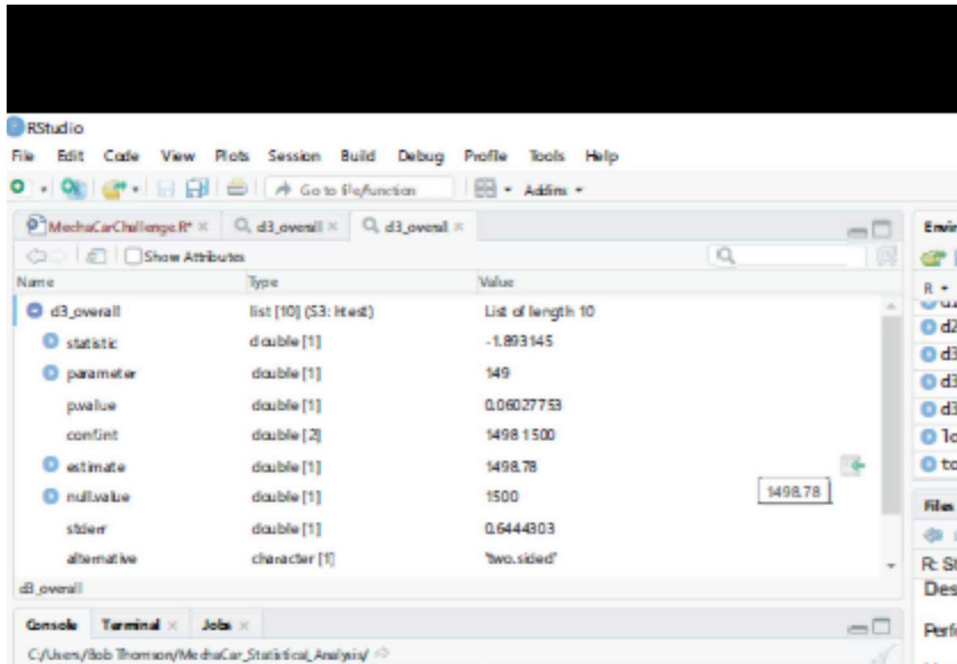
Deliverable 2 – Summary by Lot



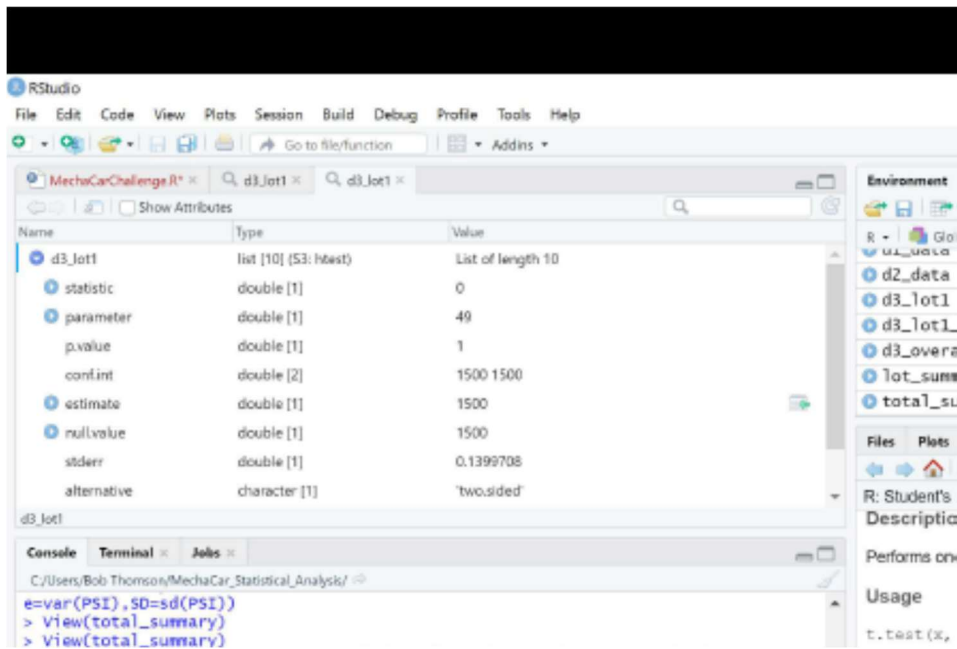
The screenshot shows the RStudio interface with the 'MechaCarChallenge.R' script open. The 'lot_summary' tab is active, displaying a summary table for the dataset grouped by lot. The table has five columns: Manufacturing Lot, Mean, Median, Variance, and SD. The first three rows show the summary for Lot1, Lot2, and Lot3.

	Manufacturing Lot	Mean	Median	Variance	SD
1	Lot1	1500.00	1500.0	0.9795918	0.9897433
2	Lot2	1500.20	1500.0	7.4693878	2.7330181
3	Lot3	1496.14	1498.5	170.2861224	13.0493725

Deliverable 3 – T-Test of Entire Dataset



Deliverable 3 – T-Test of Lot 1



Deliverable 3 – T-Test of Lot 2

The screenshot shows the RStudio interface with the Environment pane displaying the results of a t-test for Lot 2. The Environment pane shows a list of objects, including `d3_lot2`, which is a list of length 10. The Environment pane also shows the Files and Plots panes.

Name	Type	Value
<code>d3_lot2</code>	list [10] (S3: htest)	List of length 10
<code>statistic</code>	double [1]	0.5174549
<code>parameter</code>	double [1]	49
<code>p.value</code>	double [1]	0.6071669
<code>conf.int</code>	double [2]	1499 1501
<code>estimate</code>	double [1]	1500.2
<code>null.value</code>	double [1]	1500
<code>stderr</code>	double [1]	0.3865071
<code>alternative</code>	character [1]	"two.sided"

The Console pane shows the following code and output:

```
> lot_summary <- d2_data %>% group_by(Manufacturing_Lot) %>% summarize(Mean=mean(P
PSI), Median=median(PSI), Variance=var(PSI), SD=sd(PSI))
> View(lot_summary)
```

Deliverable 3 – T-Test of Lot 3

The screenshot shows the RStudio interface with the Environment pane displaying the results of a t-test for Lot 3. The Environment pane shows a list of objects, including `d3_lot3`, which is a list of length 10. The Environment pane also shows the Files and Plots panes.

Name	Type	Value
<code>d3_lot3</code>	list [10] (S3: htest)	List of length 10
<code>statistic</code>	double [1]	-2.091619
<code>parameter</code>	double [1]	49
<code>p.value</code>	double [1]	0.04167797
<code>conf.int</code>	double [2]	1492 1500
<code>estimate</code>	double [1]	1496.14
<code>null.value</code>	double [1]	1500
<code>stderr</code>	double [1]	1.84546
<code>alternative</code>	character [1]	"two.sided"

The Console pane shows the following code and output:

```
> View(lot_summary)
> d3_overall <- t.test(d2_data$PSI, mu=1500)
> View(d3_overall)
> View(d3_overall)
> d3_lot1_data <- d2_data[d2_data$Manufacturing_Lot == "Lot1",]
```