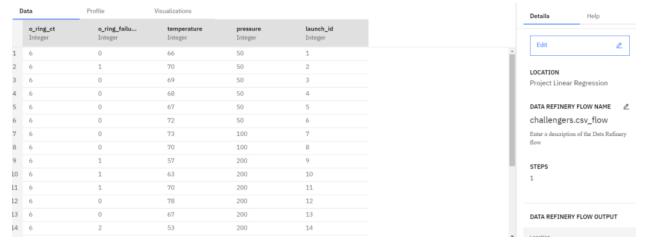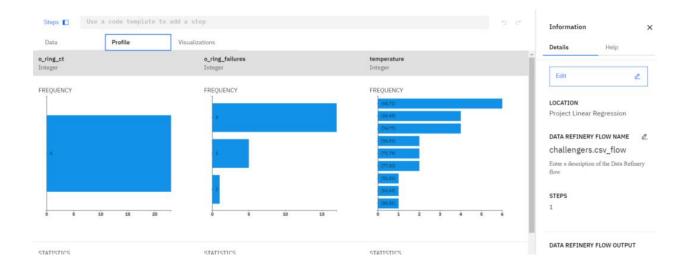# ASSIGNMENT – 2

RISK ANALYSIS OF SPACE SHUTTLE
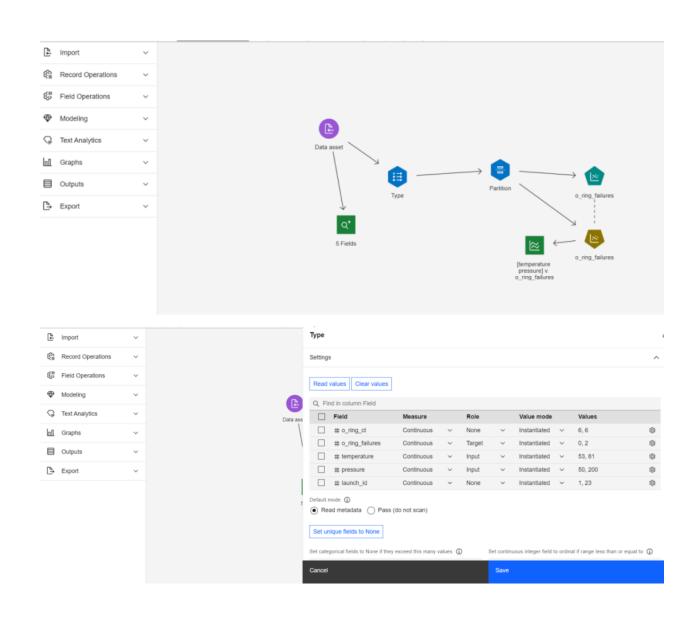
NAME : Harendhar K

Reg no : 19BEE0140

Campus : VIT Vellore

Import

Record Operations

Field Operations

Modeling

Text Analytics

Graphs

Outputs

Export

Data asset

5 Fields

Type

Partition

o_ring_failures

o_ring_failures

[temperature pressure] v. o_ring_failures

Import

Record Operations

Field Operations

Modeling

Text Analytics

Graphs

Outputs

Export

Type

Settings

Read values   Clear values

Q Find in column Field

	Field	Measure	Role	Value mode	Values	
☐	# o_ring_ct	Continuous	None	Instantiated	6, 6	⚙
☐	# o_ring_failures	Continuous	Target	Instantiated	0, 2	⚙
☐	# temperature	Continuous	Input	Instantiated	53, 81	⚙
☐	# pressure	Continuous	Input	Instantiated	50, 200	⚙
☐	# launch_id	Continuous	None	Instantiated	1, 23	⚙

Default mode ⓘ
◉ Read metadata   ○ Pass (do not scan)

Set unique fields to None

Set categorical fields to None if they exceed this many values ⓘ   Set continuous integer field to ordinal if range less than or equal to ⓘ

Cancel   Save

View Model: o_ring_failures

Regression

EVALUATION

Model Summary
ANOVA
Coefficients

MODEL VIEWER

Build Settings
Training Summary

Model Summary ①

	1
R	0.822 [1]
R Square	0.676
Adjusted R Square	0.633
Std. Error of the Estimate	0.368

[1] Predictors: (Constant), [%1:, pressuretemperature

View Model: o_ring_failures

Regression

EVALUATION

Model Summary
ANOVA
Coefficients

MODEL VIEWER

Build Settings
Training Summary

ANOVA ①

	1		
	Regression	Residual	Total
Sum of Squares	4.243	2.034	6.278
df	2.000	15.000	17.000
Mean Square	2.122	0.136	
F	15.645		
Sig.	0.000		

View Model: o_ring_failures

Regression

EVALUATION

Model Summary

ANOVA

Coefficients

MODEL VIEWER

Build Settings

Training Summary

Build Settings ⓘ

Use partitioned data	true
Calculate predictor importance	true
Method	Enter
Include constant in equation	true
Use weight	false
Mode	Simple

View Model: o_ring_failures

Regression

EVALUATION

Model Summary

ANOVA

Coefficients

MODEL VIEWER

Build Settings

Training Summary

Training Summary ⓘ

Algorithm	Regression
Model type	Approximation
Date built	Wed Apr 20 06:54:47 UTC 2022
Elapsed time for model build	0 hours, 0 mins, 3 secs

View Output: Data Audit of [o_ring_ct o_ring_failures temperature pressure launch_id]

Compare

	Field	Graph	Measurement	Min	Max	Mean	Std. Dev	Skewness	Unique	Valid
1	o_ring_ct		Continuous	6	6	6	0	--	--	23
2	o_ring_failures		Continuous	0	2	0.304	0.559	1.735	--	23
3	temperature		Continuous	53	81	69.565	7.057	-0.654	--	23
4	pressure		Continuous	50	200	152.174	68.221	-0.791	--	23
5	launch_id		Continuous	1	23	12	6.782	0	--	23

	Field	Measurement	Outliers	Extremes	Action	Impute Missing	Method	% Complete	Valid Records	Null Value	Empty String
1	o_ring_ct	Continuous	0	0	None	Never	Fixed	100.000	23	0	0

	Field	Graph	Measurement	Min	Max	Mean	Std. Dev	Skewness	Unique	Valid
3	temperature		Continuous	53	81	69.565	7.057	-0.654	--	23
4	pressure		Continuous	50	200	152.174	68.221	-0.791	--	23
5	launch_id		Continuous	1	23	12	6.782	0	--	23

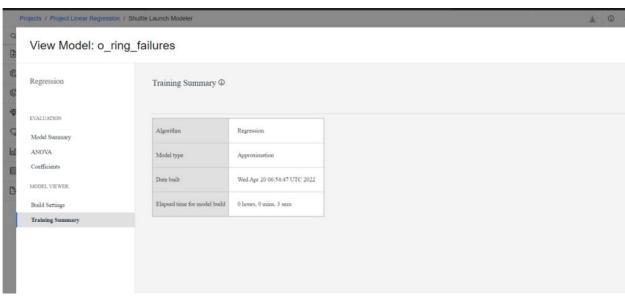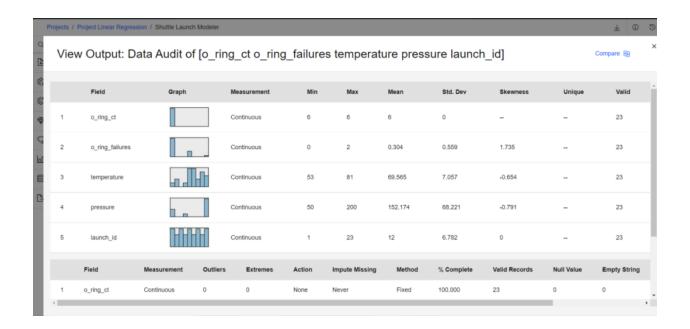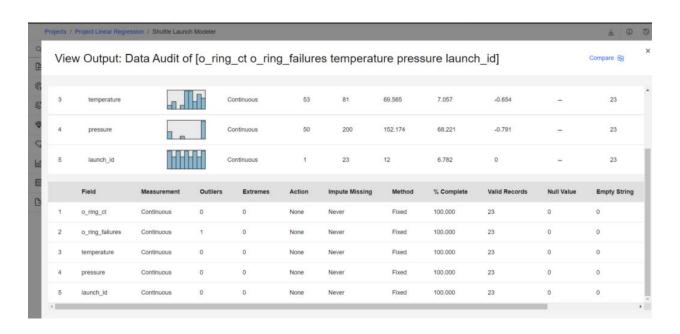|	Field	Measurement	Outliers	Extremes	Action	Impute Missing	Method	% Complete	Valid Records	Null Value	Empty String
1	o_ring_ct	Continuous	0	0	None	Never	Fixed	100.000	23	0	0
2	o_ring_failures	Continuous	1	0	None	Never	Fixed	100.000	23	0	0
3	temperature	Continuous	0	0	None	Never	Fixed	100.000	23	0	0
4	pressure	Continuous	0	0	None	Never	Fixed	100.000	23	0	0
5	launch_id	Continuous	0	0	None	Never	Fixed	100.000	23	0	0

View Output: temperature v. pressure v. $E-o_ring_failures