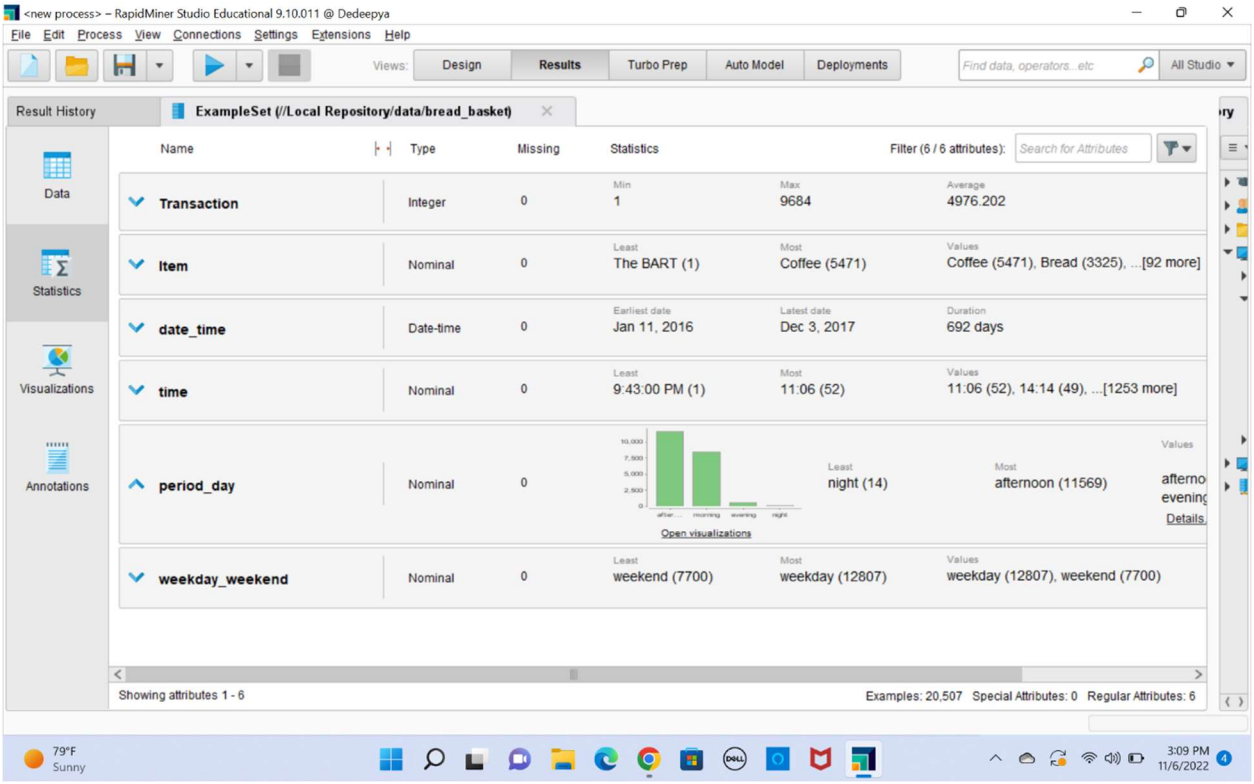
a)

Variable	Data Type
Transaction	Integer
Item	Nominal
date_time	Date-Time
time	Nominal
Period_day	Nominal
Weekday_Weekend	Nominal

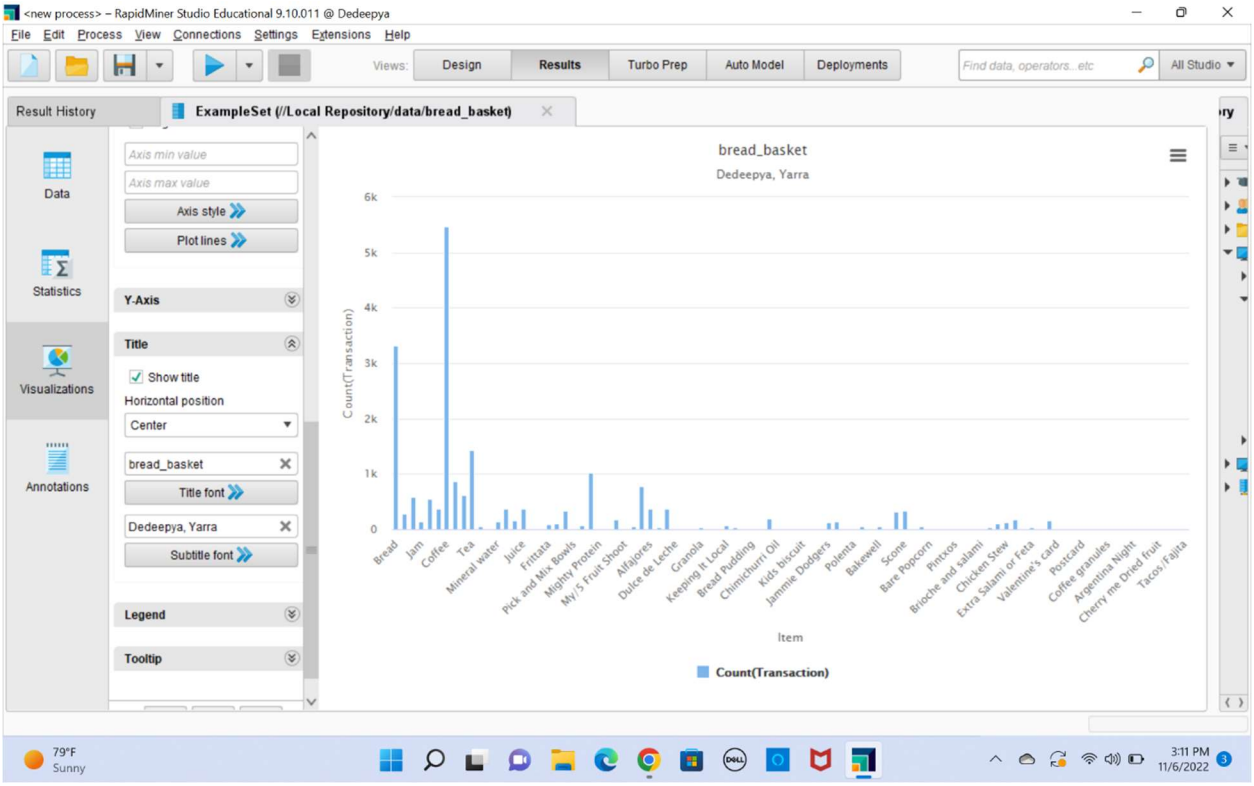
b) Most repeated period_day in the given examples is afternoon. Afternoon is present in 11569 records.

Values	Absolute Count
afternoon	11569
morning	8404
evening	520
night	14

c)

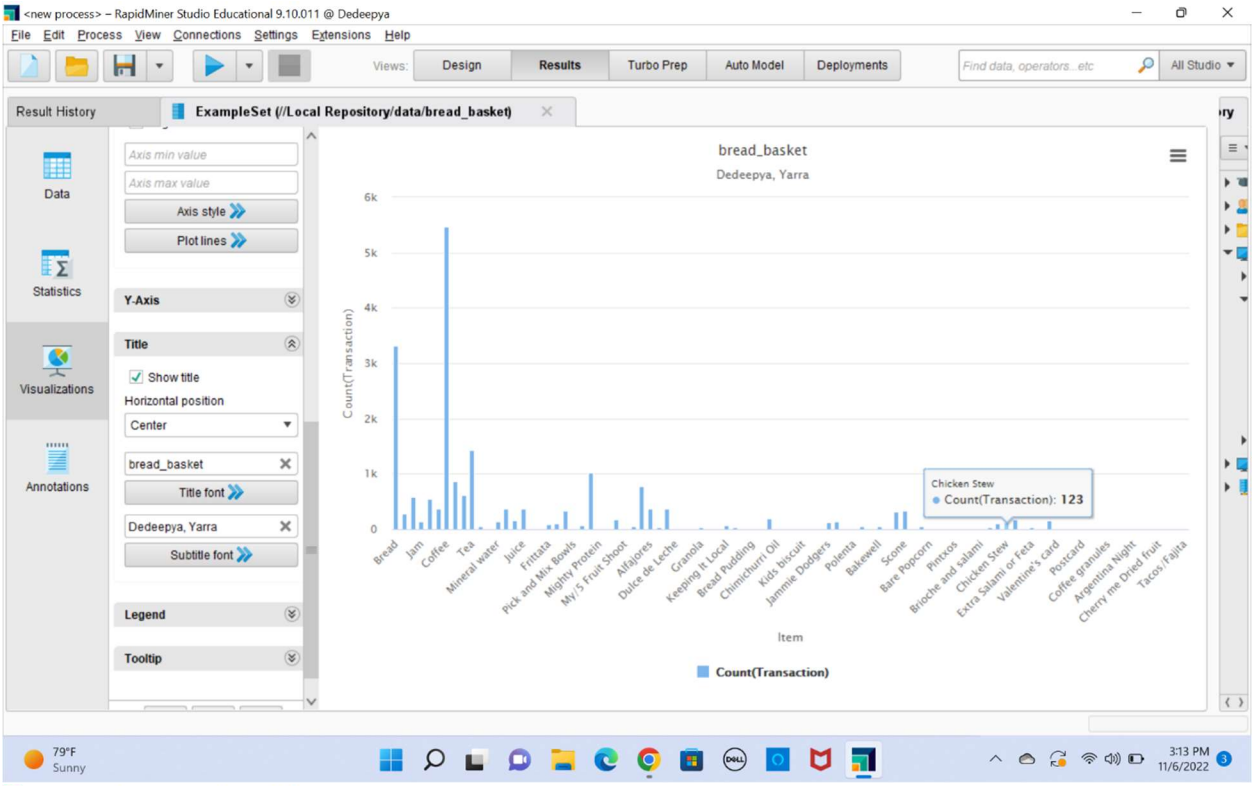


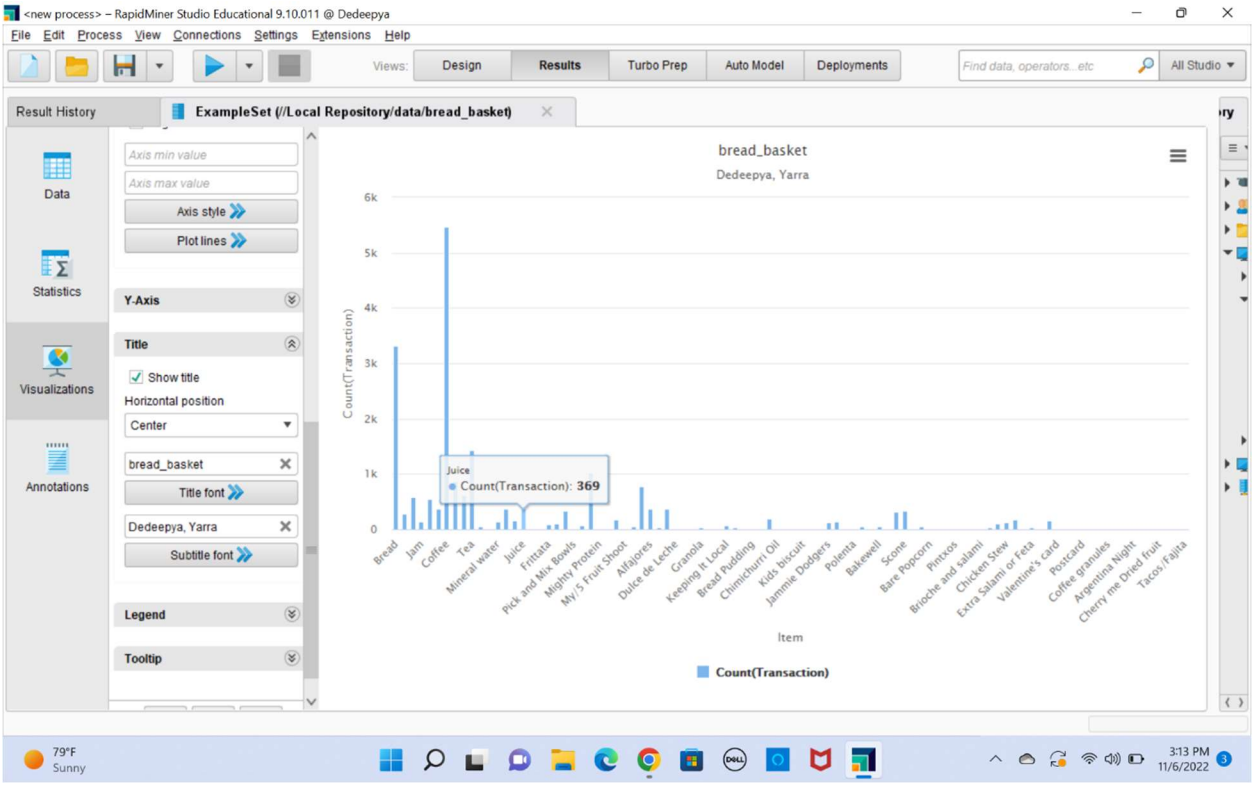
d)



e)

	Count of transactions
Coffee	5471
Tea	1435
Alfajores	369
Juice	369
Chicken Stew	123


<new process> – RapidMiner Studio Educational 9.10.011 @ Dedeepya
File Edit Process View Connections Settings Extensions Help
Views: Design Results Turbo Prep Auto Model Deployments
Find data, operators...etc
All Studio
Result History
ExampleSet (//Local Repository/data/bread_basket)
Data
Statistics
Visualizations
Annotations
Axis min value
Axis max value
Axis style
Plot lines
Y-Axis
Title
Show title
Horizontal position
Center
bread_basket
Title font
Dedeepya, Yarra
Subtitle font
Legend
Tooltip
bread_basket
Dedeepya, Yarra
Count(Transaction)
Item
Chicken Stew
Count(Transaction): 123
Bread
Jam
Coffee
Tea
Mineral water
Juice
Frittata
Pick and Mix Bowls
Mighty Protein
My 5 Fruit Shoot
Alfajores
Dulce de Leche
Granola
Keeping It Local
Bread Pudding
Chimichurri Oil
Kids biscuit
Jammie Dodgers
Polenta
Bakewell
Scone
Bare Popcorn
Pmtcos
Brioche and salami
Chicken Stew
Extra Salami or Feta
Valentine's card
Postcard
Coffee granules
Argentina Night
Cherry me Dried fruit
Tacos/Fajita
79°F
Sunny
3:13 PM
11/6/2022


<new process> – RapidMiner Studio Educational 9.10.011 @ Dedeepya
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bread_basket
Dedeepya, Yarra
Count(Transaction)
Item
Juice
Count(Transaction): 369
Bread
Jam
Coffee
Tea
Mineral water
Juice
Frittata
Pick and Mix Bowls
Mighty Protein
My 5 Fruit Shoot
Alfajores
Dulce de Leche
Granola
Keeping It Local
Bread Pudding
Chimichurri Oil
Kids biscuit
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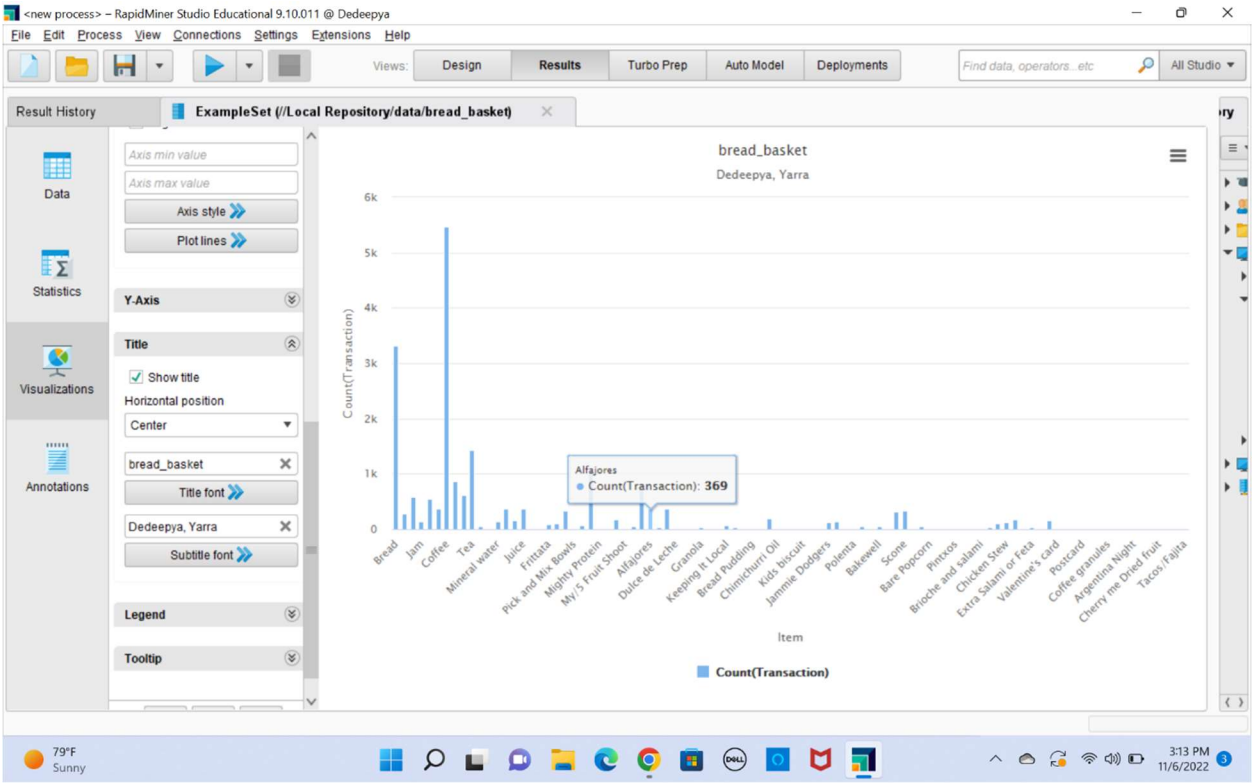
<new process> – RapidMiner Studio Educational 9.10.011 @ Dedeepya
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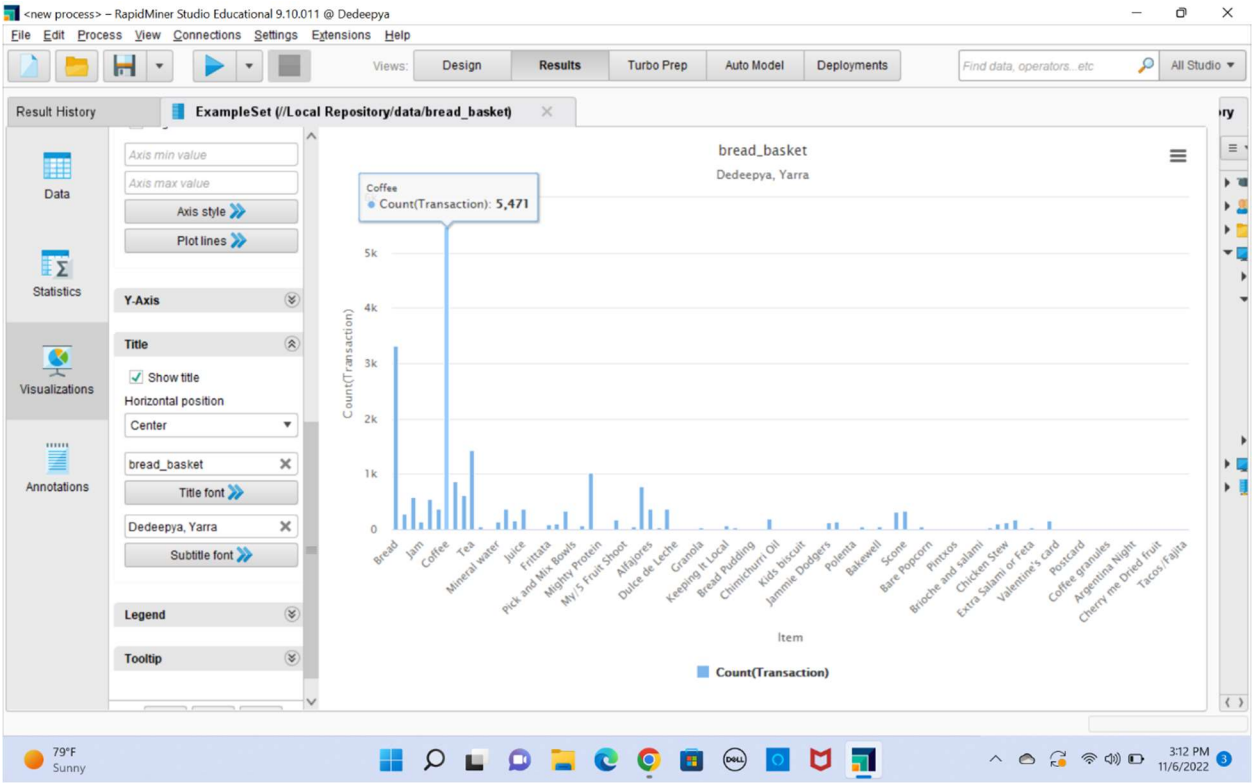
Legend
Tooltip
bread_basket
Dedeepya, Yarra
Alfajores
Count(Transaction): 369
Count(Transaction)
Item
Count(Transaction)
79°F
Sunny
3:13 PM
11/6/2022


<new process> – RapidMiner Studio Educational 9.10.011 @ Dedeepya
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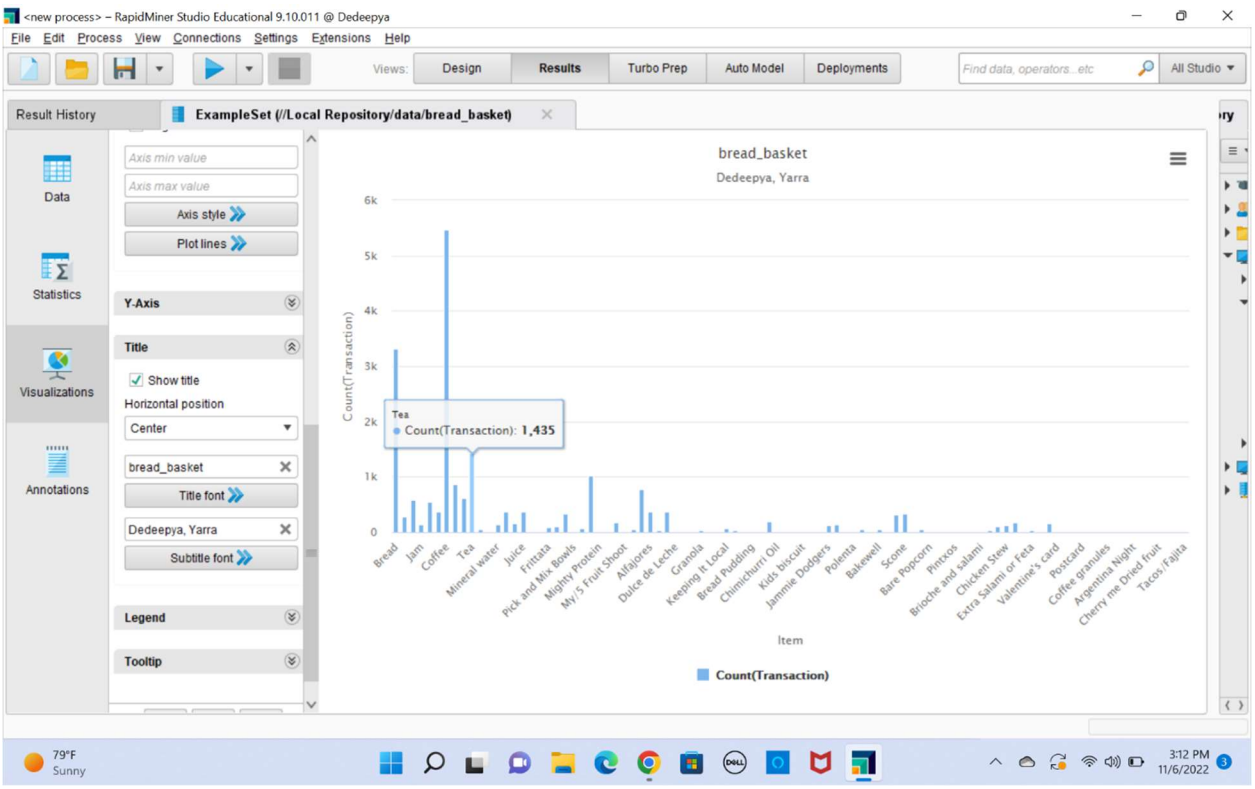
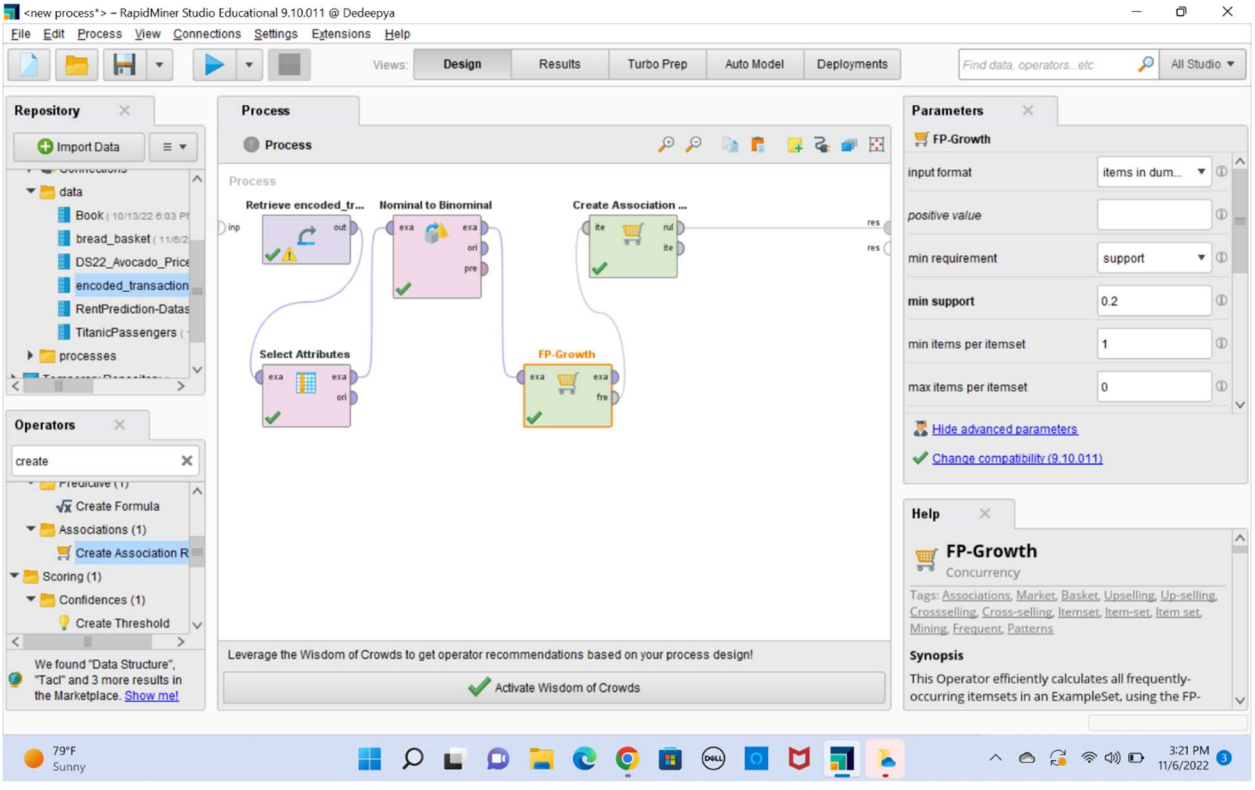
Show title
Horizontal position
Center
bread_basket
Title font
Dedeepya, Yarra
Subtitle font
Legend
Tooltip
bread_basket
Dedeepya, Yarra
Coffee
Count(Transaction): 5,471
Count(Transaction)
Item
Count(Transaction)
79°F
Sunny
3:12 PM
11/6/2022

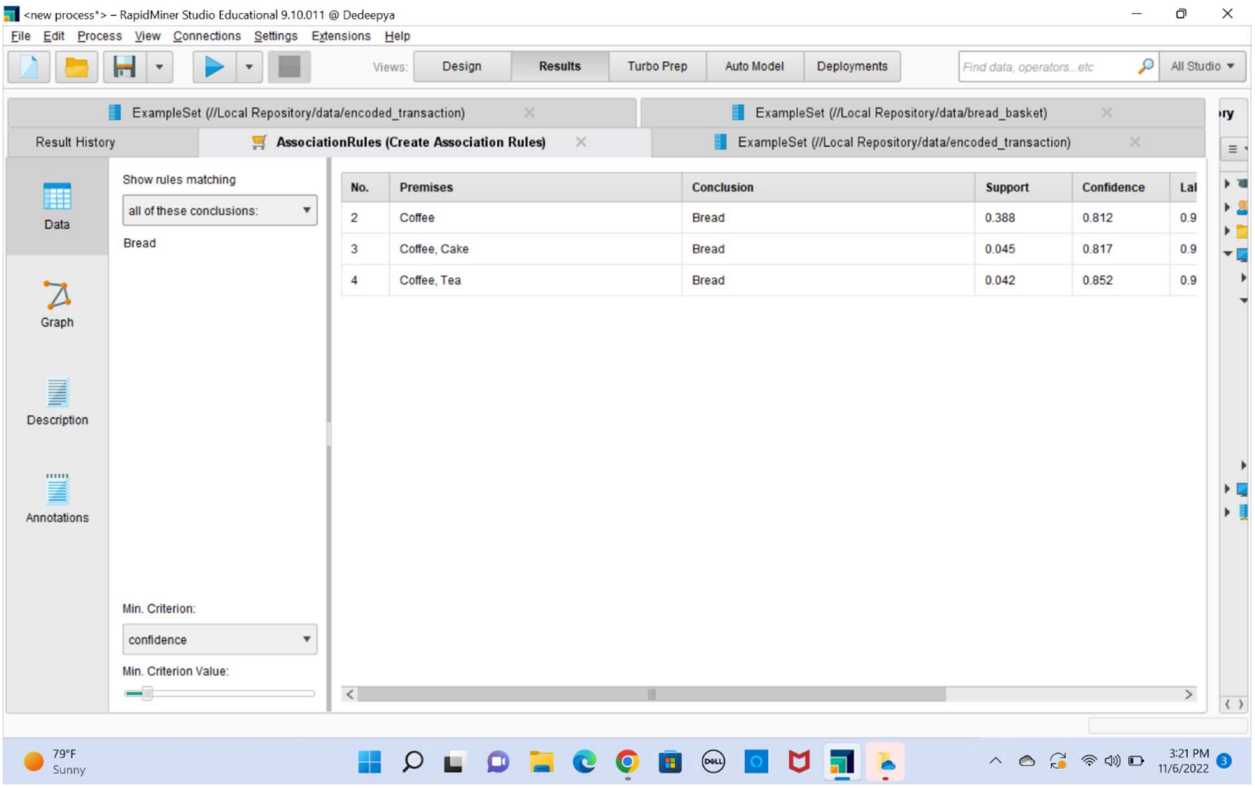


Association-Rule-Mining-Process:

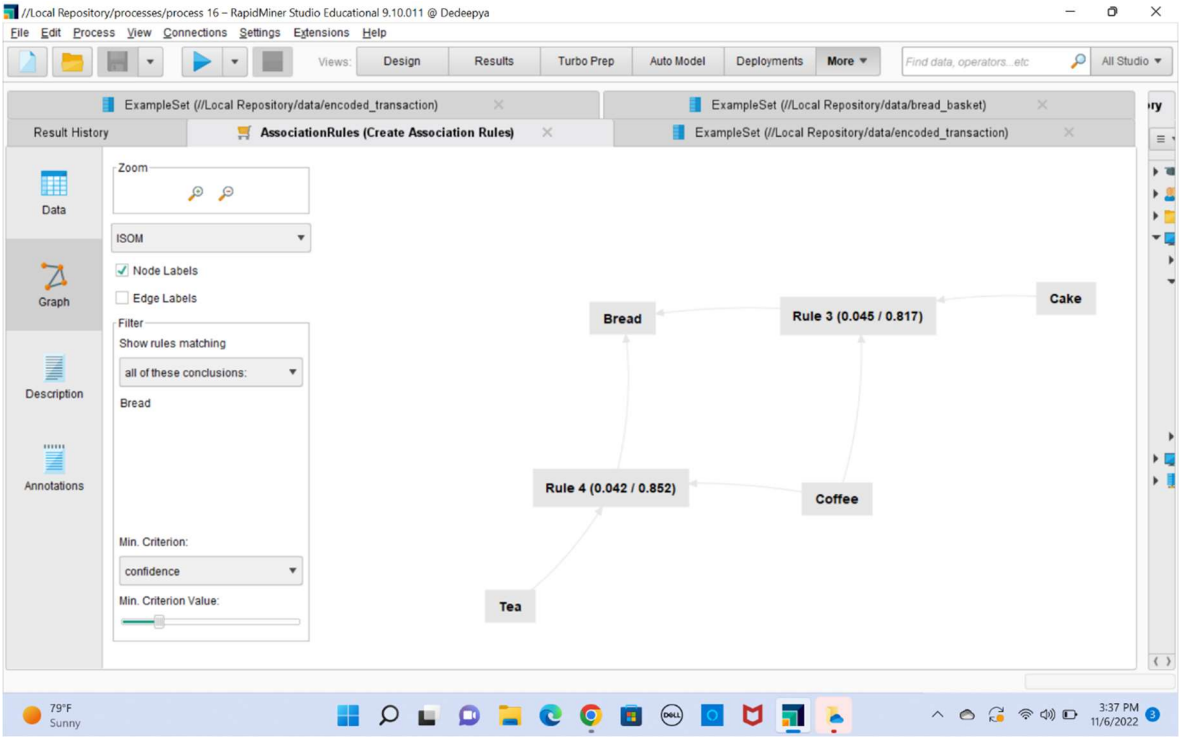


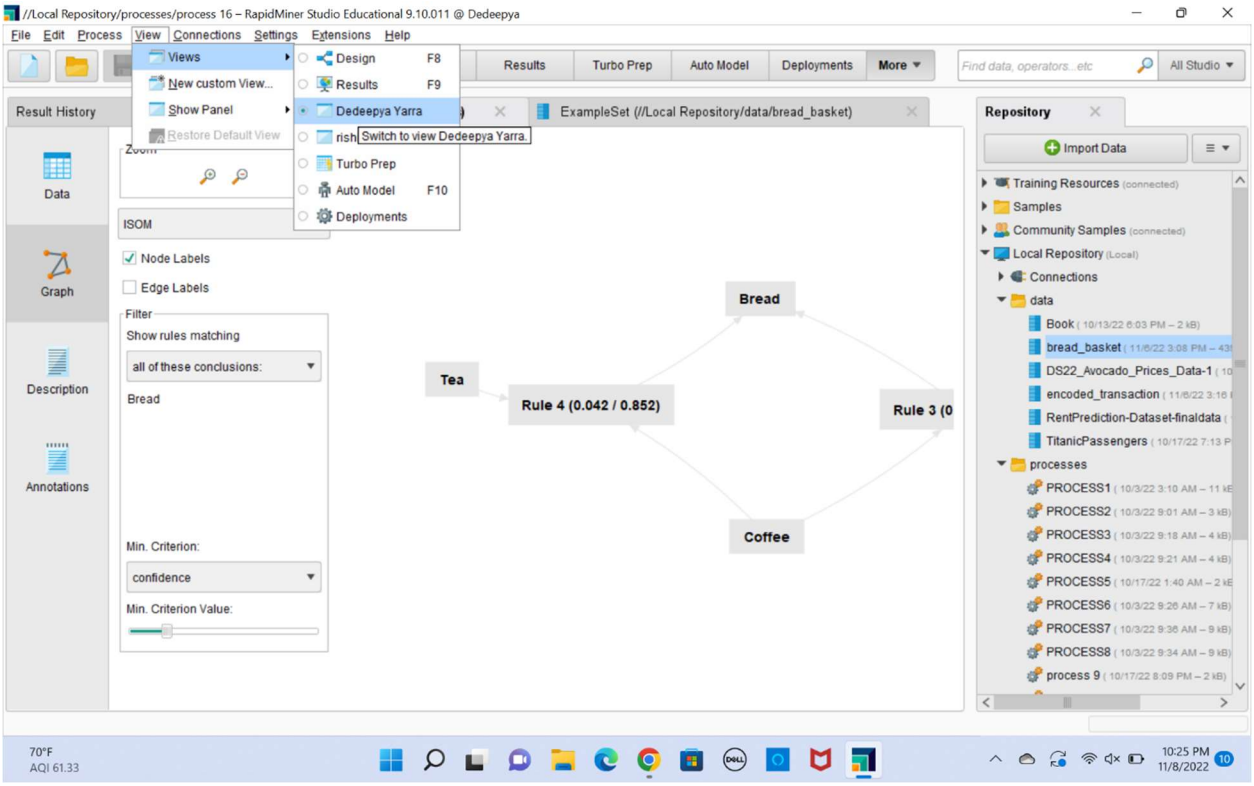
Results:

Premises	Conclusion	Support	Confidence	LaPlace	Gain	p-s	Lift	Conviction
Coffee	Bread	0.388	0.812	0.939	-0.568	0.067	1.207	1.739
Coffee, Cake	Bread	0.045	0.817	0.990	-0.065	0.008	1.214	1.784
Coffee, Tea	Bread	0.042	0.852	0.993	-0.057	0.009	1.266	2.206



Graph Screenshot:





From the below screenshot of AssociationRules we can see that we have 0.817 confidence for rule {coffee, cake}-→{bread} and also support of 0.042

Coffee and cake are antecedents, Bread is consequent

From this we can say that

There is 0.042 support that the number of transactions that include coffee, cake, and Bread

There is 0.817 confidence for rule i.e probability of the items occurring together by the probability of the occurrence of the coffee and cake.