

① Field Summary.

② Text function.

③ Conversion function.

④ Informational function.

⑤ Statistical function.

⑥ Multikv.

⑦ bin command.

⑧ xyseries.

⑨ untable.

⑩ foreach.

⑪ Date & time fun. (strftime, strptime)

⑫ mv expand.

⑬ Coalesce.

⑭ Studio (Input filter)

⑮ MLTK Toolkit.

① Studio Dashboard:-

① Base Search

② chain Search

③ Saved Search

④ Geo Map

⑤ filter

⑥ Visualization.

② Text function:-

① len → length of the string.

② lower → string to the lower case.

③ upper → string to the upper case.

④ ltrim → Trim the certain value from the string from the left.

⑤ replace → Replace a certain value with other value.

⑥ rtrim → Trim from the right side.

- ⑥ rtrim → Trim from the right -
⑦ trim → Trim a certain value from the string.

replace → $\langle \text{str} \rangle, \langle \text{regex} \rangle, \langle \text{replacement} \rangle$

② Information function:-

- ① isbool - True/false
- ② isdouble - Double Data Type
- ③ isint - Value is integer
- ④ isnull - The Value is there/not
- ⑤ isnum - Value is Number.
- ⑥ isstr - Value is string / Not.
- ⑦ typeof($\langle \text{value} \rangle$) - Define the format of the string.

④ Statistical Commands:-

- ① stat
- ② streamstat
- ③ eventstat Command.

⑤ Date & Time function

- ① `strptime` → convert date & time value into epoch format
- ② `strftime` → Convert the epoch date into human readable format

09-09-09 09:09

US → %m-%d-%Y
EMEA → %Y-%m-%d
APAC → %d-%m-%Y

D_1, D_2

$(D_2 - D_1) \times$

$(D_2_time_epoch - D_1_time_epoch)$

```
index=main source="Sample_tickets.csv"
| table time_submitted, last_resolved_date
| eval last_resolved_epoch = strptime(last_resolved_date, "%d-%m-%y %H:%M")
| eval time_submitted_epoch = strptime(time_submitted, "%d-%m-%y %H:%M")
| eval diff = last_resolved_epoch - time_submitted_epoch
| eval time_submitted_format = strftime(time_submitted_epoch, "%d-%B-%Y %A")
| eval diff_format = strftime(diff, "%d")
```

⑥ Xyseries:-

```
index=main source="Sample_tickets.csv"
| stats count by severity, current_ticket_state
| xyseries severity, current_ticket_state, count
| fillnull
```

⑦ Untable Command

```

index=main source="Sample_tickets.csv"
| stats count by severity, current_ticket_state
| xseries severity, current_ticket_state, count
| untable severity, current_ticket_state, count

```

@Bin •

⑧ Bin Command:-

```

index=main source="Sample_tickets.csv"
| bin span=1mon _time
| stats count by _time, severity

```

⑨ mvexpand:-

```

| makeresults count=5
| streamstats count as counter
| eval field1 = "col1", field2="col2"
| mvcombine delim=";" counter
| mvexpand counter

```

⑩ FieldSummary:- It will summarize the end of every field in the filtered dataset.

```

index=main source="data.csv"
| fieldsummary

```

⑪ Coalesce Command:-

A	B	C
a	x	
s	y	z
d		
e	v	w

A	D
	x

eval D = Coalesce(B, C)

A	D
a	x
b	y
c	z
d	v
e	w

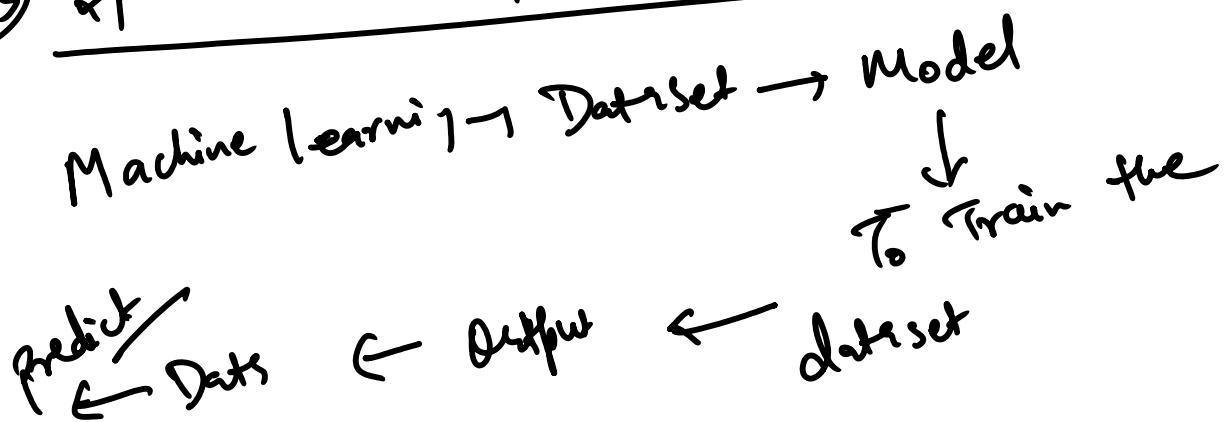
eval D = Concatenate

⑫ Forecast Command:-

Run the subsearch that will run in the iteration.

```
| makeresults
| eval myfield1 = 5, myfield2 = 10
| foreach myfield*
| eval <<FIELD>> = '<<FIELD>>' + <<MATCHSTR>>]
```

⑬ Splunk MLTK Toolkit:-



① Linear Regression.

② Multi Linear Regression.

① Linear Regression:-

Cost of My House \propto Size of House
" " (variable)

Cost of My House \propto Size

Cost \propto Size (Variable)

Only one factor is involved in Prediction.

② Multi-linear Reg:-

Cost of Home = Size + Proximity + Age + Build Quality
Multiple factors involved for the Prediction.

Cost of My Car \propto Age of Car \rightarrow Single linear Regression

Cost of Car \propto Age, Kms, Diesel/Petrol/CNG, Auto/Manual, engine
 \downarrow
Multiple linear Regression

Python } ML Code/Algo.
R }

Predict \rightarrow LL
 \rightarrow BSL
 \rightarrow LT
 \rightarrow LCP

Datasets \rightarrow Training Data (70%) \rightarrow Model which is trained is Correct/Not.
 \rightarrow Update

Dataset
100 rows

Test data
(30%)

Future Prediction.