

# KQL Language

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## resources

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<https://learn.microsoft.com/en-us/microsoft-365/security/defender/advanced-hunting-query-language?view=o365-worldwide>

<https://learn.microsoft.com/en-us/azure/data-explorer/kusto/query/>

<https://learn.microsoft.com/en-us/training/modules/explore-fundamentals-kql/>

<https://aka.ms/lademo>

<https://www.youtube.com/@TenMinuteKQL>

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## Syntax

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- `//` > comment
- `ctrl + k + c` > comment
- `ctrl + k + u` > uncomment
- `where >>` clause is used to filter records based on specified conditions
- `take >>` operator is used to limit the number of records (rows)
- `cluster('help').database('SecurityLogs').Email >>` KQL made from cluster contain DB contain table
- `== >>` exact match
- `!= >>` does not include
- `~= >>` matching for regex pattern
- `contains >>` operator for string matching
- `has >>` looks for full string but can use delimiters and is not case sensitive
- `endswith >>` to get the end of a string
- `startswith >>` to get the starting of the string
- to make it case sensitive add `_cs >> startswith_cs` or `endswith_cs`
- `sort by >>` sorts the result by time or hostname or what ever u want
- `order by >>` similar to sort by
- `distinct >>` used to retrieve unique values from a specified column in a table

- project >> display the rows we want only
- project-reorder >> To achieve reordering of columns
- instead of using two where user one where and (and)
- where \* has "389" >> to search in all the records for 389
- limit >> same as take
- top >> same as take but it give u the top of the results // top 10 by TimeGenerated desc
- TimeGenerated >= ago(7d) >> to display a timestamp greater than 7 days
- TimeGenerated <= ago(4h) >> less than four hours // less than mean older
- between >> to display a the frame between two dates // where StartTime between (datetime(2007-07-27) .. datetime(2007-07-30))
- now >> display the time between date and NOW // where StartTime between (datetime(2007-07-27) .. now())
- now - date >> same as above but to display four hours earlier //// where StartTime between (datetime(2007-07-27) .. now() -4h))