

## BI / read / 1

BI 1	query	BI / read / 1				
BI 2	title	Posting summary				
BI 3	pattern	<div><div>message: Message</div><div>creationDate &lt; \$dateTime</div><div>length year(creationDate)</div></div>				
BI 4						
BI 5						
BI 6						
BI 7						
BI 8	desc.	Given a datetime, find all Messages created before that moment. Group them by a 3-level grouping:				
BI 9						
BI 10						
BI 11						
BI 12						
BI 13						
BI 14						
BI 15						
BI 16						
BI 17						
BI 18	params	1	datetime	DateTime	For later microbatches, later datetime parameters are selected keep the variance low (<0.5%)	
BI 20						
result	1	year	32-bit Integer	R	year(message.creationDate)	
	2	isComment	Boolean	M	True for Comments, False for Posts	
	3	lengthCategory	32-bit Integer	C	0 for short, 1 for one-liner, 2 for tweet, 3 for long	
	4	messageCount	32-bit Integer	A	Total number of Messages in that group	
	5	averageMessageLength	32-bit Integer	A	Average length of the Message content in that group	
	6	sumMessageLength	32-bit Integer	A	Sum of all Message content lengths	
	7	percentageOfMessages	32-bit Float	A	Number of Messages in group as a percentage of all messages created before the given date	
sort	1	year	↓			
	2	isComment	↑	False < True, i.e. Posts come first and Comments second		
	3	lengthCategory	↑	order based on the lengthCategory value		
CPs	1.2, 3.2, 4.1, 4.2, 8.5					