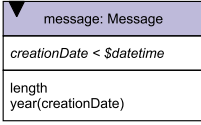


BI / read / 1

BI 1	query	BI / read / 1				
BI 2	title	Posting summary				
BI 3	pattern					
BI 4						
BI 5	description	<p>Given a \$datetime, find all Messages created before that moment. Group them by a 3-level grouping:</p> <ol style="list-style-type: none"> by year of creation for each year, group into Message types: is Comment or not for each year-type group, split into four groups based on length of their content <ul style="list-style-type: none"> 0: $0 \leq \text{length} < 40$ (short) 1: $40 \leq \text{length} < 80$ (one liner) 2: $80 \leq \text{length} < 160$ (tweet) 3: $160 \leq \text{length}$ (long) 				
BI 6						
BI 7						
BI 8						
BI 9						
BI 10						
BI 11						
BI 12						
BI 13						
BI 14						
BI 15	params	1	\$datetime	DateTime		
BI 16	result	1	year	32-bit Integer	R	year(message.creationDate)
BI 17		2	isComment	Boolean	M	True for Comments, False for Posts
BI 18		3	lengthCategory	32-bit Integer	C	0 for short, 1 for one-liner, 2 for tweet, 3 for long
BI 19		4	messageCount	64-bit Integer	A	Total number of Messages in that group
BI 20		5	averageMessageLength	32-bit Float	A	Average length of the Message content in that group
		6	sumMessageLength	64-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	↑		
	limit	n/a				
	CPs	1.2, 3.2, 4.1, 4.2, 8.5				