

## BI / read / 12

query	BI / read / 12				
title	How many persons have a given number of messages				
pattern	<div><div><div>2. personCount = count</div><div>Person</div><div>count Persons grouped by messageCount value</div></div><div>hasCreator</div><div><div>1. messageCount = count</div><div>Message</div><div>content not empty and length &lt; \$lengthThreshold and \$date &lt; creationDate</div></div><div>«opt» replyOf*0..</div><div>Post</div><div>language in \$languages</div></div>				
desc.	<p>For each Person, count the number of Messages they made (messageCount). Only count Messages with the following attributes:</p> <ul style="list-style-type: none"><li>• Its content is not empty (and consequently, the imageFile attribute is empty for Posts).</li><li>• Its length is below the lengthThreshold (exclusive, equality is not allowed).</li><li>• Its creationDate is after date (exclusive, equality is not allowed).</li><li>• It is written in any of the given languages.<ul style="list-style-type: none"><li>– The language of a Post is defined by its language attribute.</li><li>– The language of a Comment is that of the Post that initiates the thread where the Comment replies to.</li></ul></li></ul> <p>The Post and Comments in the reply tree’s path (from the Message to the Post) do not have to satisfy the constraints for content, length and creationDate.</p> <p>For each messageCount value, count the number of Persons with exactly messageCount Messages (with the required attributes).</p>				
params	<div><div>1</div><div>date</div><div>Date</div></div>				
	<div><div>2</div><div>lengthThreshold</div><div>32-bit Integer</div></div>				Selected as balanced against date to filter around 30% of the Messages within a language and keep the variance low
	<div><div>3</div><div>languages</div><div>{String}</div></div>				Only the most frequently used languages are selected
result	<div><div>1</div><div>messageCount</div><div>32-bit Integer</div></div>	A	Number of Messages created		
	<div><div>2</div><div>personCount</div><div>32-bit Integer</div></div>	A	Number of Persons with messageCount Messages		
sort	<div><div>1</div><div>personCount</div><div>↓</div></div>				
	<div><div>2</div><div>messageCount</div><div>↓</div></div>				
CPs	1.1, 1.2, 1.4, 3.2, 4.2, 4.3, 8.1, 8.2, 8.3, 8.4, 8.5				