## **BI / read / 12**

BI 1	query	BI / read / 12
BI 2	title	How many persons have a given number of messages
BI 3 BI 4 BI 5 BI 6 BI 7 BI 8 BI 9 BI 10 BI 11 BI 12 BI 13 BI 14 BI 15 BI 16 BI 17 BI 18 BI 19 BI 20	pattern	2. personCount = count  Person  Message  content not empty and length < \$length Threshold and \$date < creationDate  1. messageCount = count  replyOf+0  Post language in \$languages
	desc.	For each Person, count the number of Messages they made (messageCount). Only count Messages with the following attributes:  • Its content is not empty (and consequently, the imageFile attribute is empty for Posts).  • Its length is below the lengthThreshold (exclusive, equality is not allowed).  • Its creationDate is after date (exclusive, equality is not allowed).  • It is written in any of the given languages.  — The language of a Post is defined by its language attribute.  — The language of a Comment is that of the Post that initiates the thread where the Comment replies to.  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.  For each messageCount value, count the number of Persons with exactly messageCount Messages (with the required attributes).
	params	1 date Date  2 lengthThreshold 32-bit Integer Selected as balanced against date to filter around 30% of the Messages within a language and keep the variance low  3 languages {String} Only the most frequently used languages are selected
	result	1 messageCount 32-bit Integer A Number of Messages created 2 personCount 32-bit Integer A Number of Persons with messageCount Messages
	sort	1 personCount ↓ 2 messageCount ↓
	limit	n/a
	CPs	1.1, 1.2, 1.4, 3.2, 4.2, 4.3, 8.1, 8.2, 8.3, 8.4, 8.5