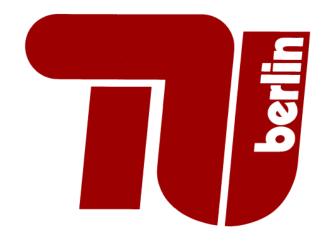
Cloud Computing

Winter Term 2018/2019
Tutorial Session 4



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Complex and Distributed IT-Systems

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Practical Assignment 4

- Q&A session for the written exam: 12.02.
- Written exam: 20.02.
- Due: 24.01.2019
- Only 1,5 weeks for this assignment!
- Summary:
 - Write two small distributed programs with Flink (introduced in lecture)
 - Datasets for the programs provided on ISIS platform
 - Execute your programs on a distributed Flink installation
 - Install Flink yourself, or use Amazon EMR

Program 1: Word Count

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Word	Occurrences
lorem	1
ipsum	2
dolor	4
sit	1
amet	5

Program 2: K-Means

Plot your results with the provided plot_clusters.py script

UMTS 262 2 13,285512 52,522202 3SM 262 2 13,276907 52,525714 3SM 262 2 13,285064 52,524 UMTS 262 2 13,28546 52,521744 UMTS 262 2 13,293457 52,521515 UMTS 262 2 13,289106 52,53273 UMTS 262 3 13,349675 52,497575 SSM 262 2 13,349711 52,497367 SSM 262 3 13,34963 52,497378 UMTS 262 3 13,34963 52,497378
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GSM 262 3 13,34963 52,497378
JMTS 262 3 13.349223 52.497519
JMTS 262 3 13,349055 52,497572
JMTS 262 2 13,349705 52,497369
JMTS 262 3 13,348491 52,498547
JMTS 262 2 13,349311 52,497605
JMTS 262 2 13,349894 52,497346
JMTS 262 2 13,348902 52,497632
JMTS 262 2 13,348857 52,497514
JMTS 262 2 13,347863 52,498668
SSM 262 2 13,349544 52,497399

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2,7E+07	13,285512	52,522202	
2,7E+07	13,276907	52,525714	
5226755	13,285064	52,524	
2,7E+07	13,285446	52,521744	
5226754	13,293457	52,521515	
2,7E+07	13,289106	52,53273	
2,7E+07	13,349675	52,497575	
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2,7E+07	13,349743	52,497437	
2,7E+07	13,34963	52,497378	
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5191681	13,349055	52,497572	
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1,6E+07	13,348491	52,498547	
5191681	13,349311	52,497605	
2,7E+07	13,349894	52,497346	
5191681	13,348902	52,497632	
5191681	13,348857	52,497514	
1,6E+07	13,347863	52,498668	
2,7E+07	13,349544	52,497399	
2,7E+07	13,349726	52,497392	
2,6E+07	13,337113	52,508959	

