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## **Lab 01: A Gentle Introduction to Hadoop**

CSC14118 Introduction to Big Data 20KHMT1

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# 1 Lab 01: A Gentle Introduction to Hadoop

## 1.1 Setting up Single-node Hadoop Cluster

## 1.2 Introduction to MapReduce

## 1.3 Running a warm-up problem: Word Count

## 1.4 Bonus

Insert table example:

Server IP Address	Ports Open
192.168.1.1	<b>TCP:</b> 21,22,25,80,443
192.168.1.2	<b>TCP:</b> 22,55,90,8080,80
192.168.1.3	<b>TCP:</b> 1433,3389 <b>UDP:</b> 1434,161

Code example:

```
print("Hello")
```

```
cat ~/.bashrc
```

Screenshot example:

```
sh-5.1$ export PS1="2112xxxx:"  
2112xxxx: echo "I'm $PS1"  
I'm 2112xxxx:  
2112xxxx: █
```

**Figure 1.1:** Proof of change your shell prompt's name

Screenshot example:



**Figure 1.2:** ImgPlaceholder

References examples:

Some text in which I cite an author.<sup>1</sup>

More text. Another citation.<sup>2</sup>

What is this? Yet *another* citation?<sup>3</sup>

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<sup>1</sup>So Chris Krycho, "Not Exactly a Millennium," chriskrycho.com, July 2015, <http://v4.chriskrycho.com/2015/not-exactly-a-millennium.html> (accessed July 25, 2015)

<sup>2</sup>Contra Krycho, 15, who has everything *quite* wrong.

<sup>3</sup>ibid

## 1.5 References

- Three Cloudera version of WordCount problem:
  - [https://docs.cloudera.com/documentation/other/tutorial/CDH5/topics/ht\\_wordcount1.html](https://docs.cloudera.com/documentation/other/tutorial/CDH5/topics/ht_wordcount1.html)
  - [https://docs.cloudera.com/documentation/other/tutorial/CDH5/topics/ht\\_wordcount2.html](https://docs.cloudera.com/documentation/other/tutorial/CDH5/topics/ht_wordcount2.html)
  - [https://docs.cloudera.com/documentation/other/tutorial/CDH5/topics/ht\\_wordcount3.html](https://docs.cloudera.com/documentation/other/tutorial/CDH5/topics/ht_wordcount3.html)
- Book: MapReduce Design Patterns [Donald Miner, Adam Shook, 2012]
- All of StackOverflow link related.