# Lab 7 Introduction to Cloud Computing -- Hadoop and MapReduce

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# Lab 7: MapReduce

Dear Pretty Little Pumpkins

 You are now invited to make experiments on Hadoop, with the programming model for MapReduce

Still, I ain't ask you to build one from raw

Pull a Hadoop-docker image will do

## Goal for Lab 7

#### Objectives:

- Understanding the concept of MapReduce Model
- Building a file system in a distributed way that store large data trunks
- Merging all things together into a docker image
- Writing some sample demo on running MapReduce models

### To Start

- Read the Hadoop wiki page and learn it
  - https://wiki.apache.org/hadoop
- Install a Hadoop Docker image, you know where to find it

- Finish the report on your experience of realizing two classic demos
  - Word Count: <a href="https://hadoop.apache.org/docs/stable/hadoop-mapreduce-client/hadoop-mapreduce-client-core/MapReduceTutorial.html#Example: WordCount v1.0">https://hadoop-mapreduce-client-core/MapReduceTutorial.html#Example: WordCount v1.0</a>
  - Quantity Analysis: <a href="https://docs.mongodb.com/manual/tutorial/map-reduce-examples/">https://docs.mongodb.com/manual/tutorial/map-reduce-examples/</a>

## Lab 7: Submission Requirement

- Use the provided basic Markdown template for your lab report online
- Fill the report with the Markdown template, including all your test procedure
- Compile it and submit it to <a href="mailto:ncuhomework@outlook.com">ncuhomework@outlook.com</a>
- Subject shall be Course Z6110X0035 CC Lab 7 #name #ID
- The deadline for this lab is May. 19<sup>th</sup>, 11:59PM (Hard Deadline)