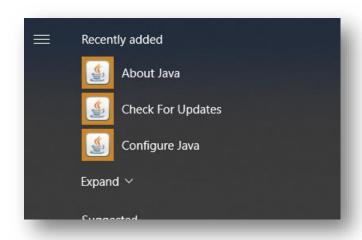
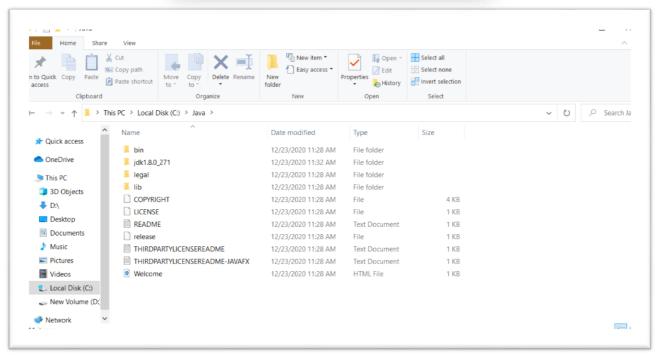
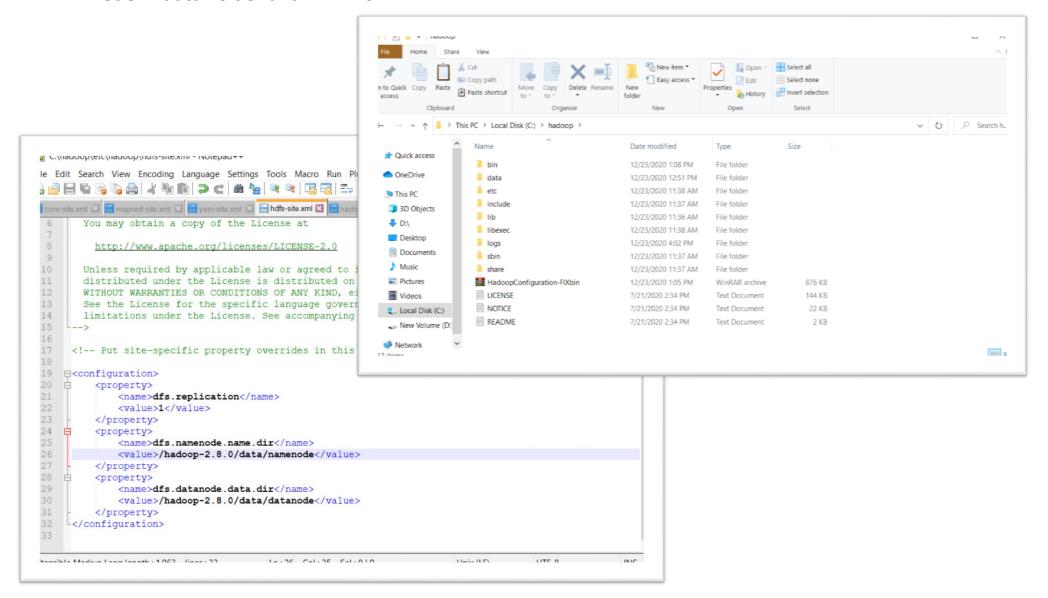
# INSTALLING HADOOP AND HOW HDFS ARCHITECTURE (NameNode and DataNode) WORKS.

### First I Installed Java





And then I Installed Hadoop (Configuring codes in some of Hadoop XML files: core,mapred,yarn,hdfs,Hadoop env. Codes source from Web) and I created Name Node and Data Node in data Folder and in HDFS XML

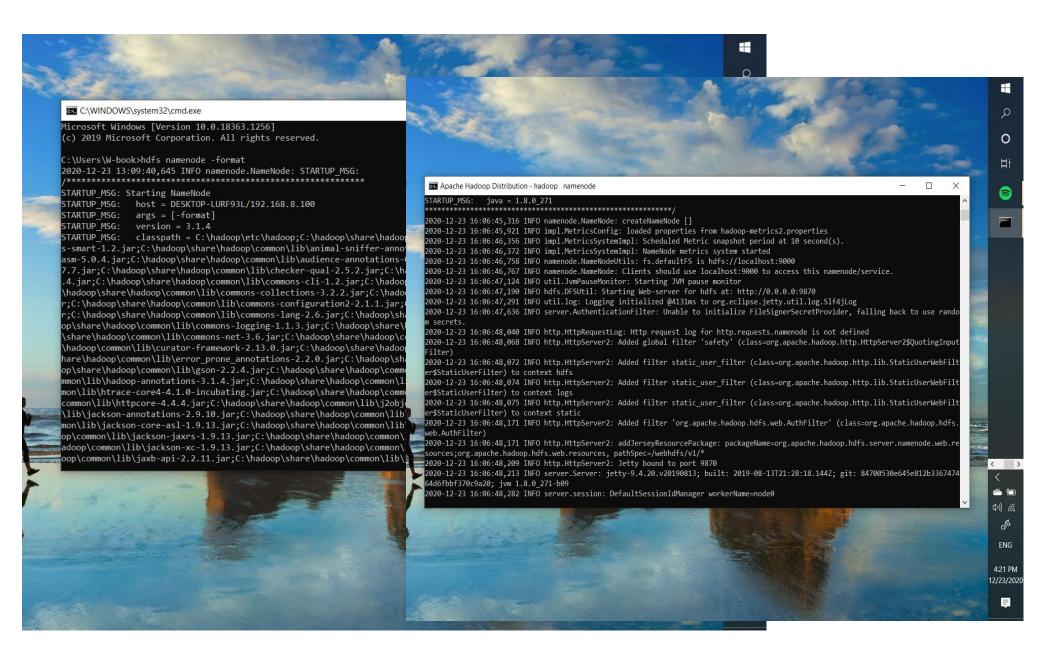


### **CMD CONFIGURE**

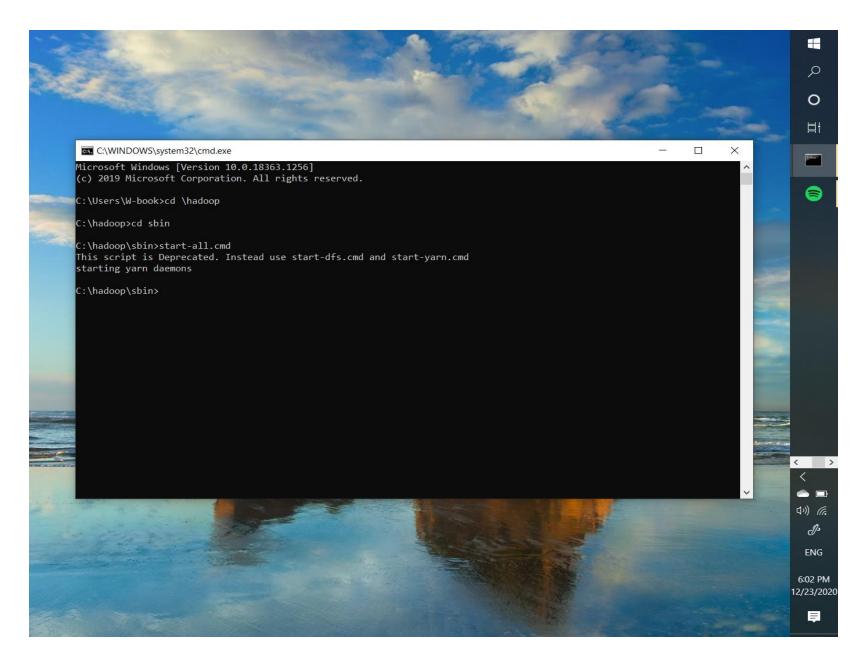
# Checking the Java if it's already installed (Checking the Java Version)

```
Command Prompt
                                                                                                                                                                                                o ×
Microsoft Windows [Version 10.0.18363.1256]
(c) 2019 Microsoft Corporation. All rights reserved.
:\Users\W-book>javac
Usage: javac <options> <source files>
 here possible options include:
                           Generate all debugging info
                            Generate no debugging info
  -g:none
  -g:{lines,vars,source}
                            Generate only some debugging info
                            Generate no warnings
  -nowarn
  -verbose
                            Output messages about what the compiler is doing
  -deprecation
                            Output source locations where deprecated APIs are used
  -classpath <path>
                            Specify where to find user class files and annotation processors
                            Specify where to find user class files and annotation processors
  -cp <path>
  -sourcepath <path>
                            Specify where to find input source files
  -bootclasspath <path>
                            Override location of installed extensions
  -endorseddirs <dirs>
                            Override location of endorsed standards path
                            Control whether annotation processing and/or compilation is done.
  -processor <class1>[,<class2>,<class3>...] Names of the annotation processors to run; bypasses default discovery process
                            Specify where to find annotation processors
 -parameters
                            Generate metadata for reflection on method parameters
 -d <directory>
                            Specify where to place generated class files
                            Specify where to place generated source files
                            Specify where to place generated native header files
  -implicit:{none,class}
                            Specify whether or not to generate class files for implicitly referenced files
  -encoding <encoding>
                            Specify character encoding used by source files
  -source <release>
                            Provide source compatibility with specified release
  -target <release>
                            Generate class files for specific VM version
  -profile <profile>
                            Check that API used is available in the specified profile
                            Version information
  -version
                            Print a synopsis of standard options
  -Akey[=value]
                            Options to pass to annotation processors
                            Print a synopsis of nonstandard options
                            Pass <flag> directly to the runtime system
                            Terminate compilation if warnings occur
 @<filename>
                            Read options and filenames from file
 :\Users\W-book>java -version
java version "1.8.0 271"
Java(TM) SE Runtime Environment (build 1.8.0_271-b09)
Java HotSpot(TM) 64-Bit Server VM (build 25.271-b09, mixed mode)
 :\Users\W-book>
                                                                                                                                                                                                              3:19 PM
                                                                                                                                                                                                             12/23/2020
```

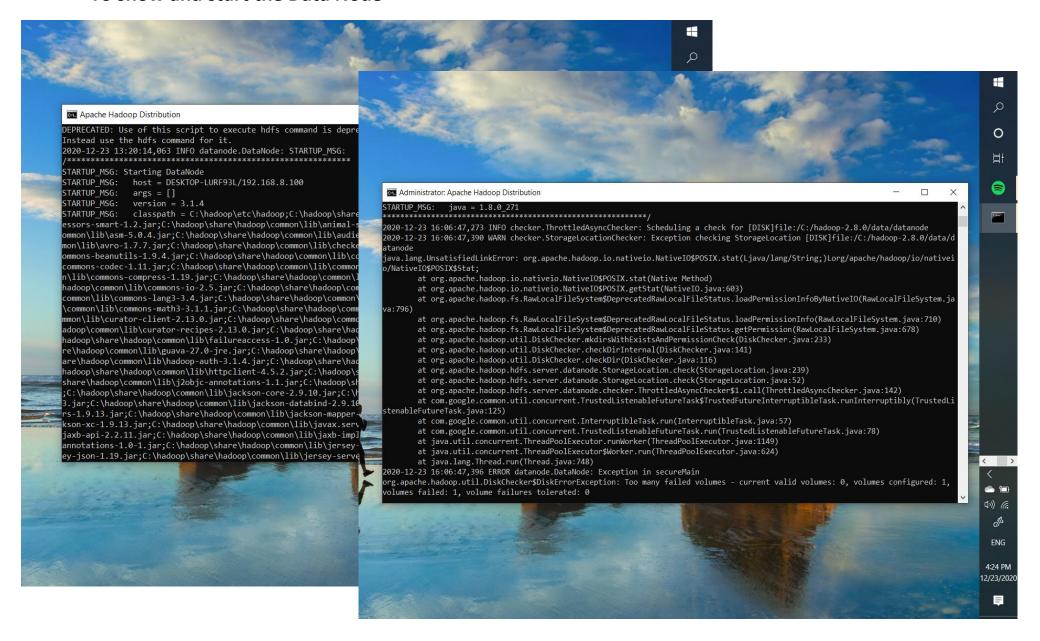
# Configuring and Creating Namenode (by typing "hdfs name node -format")



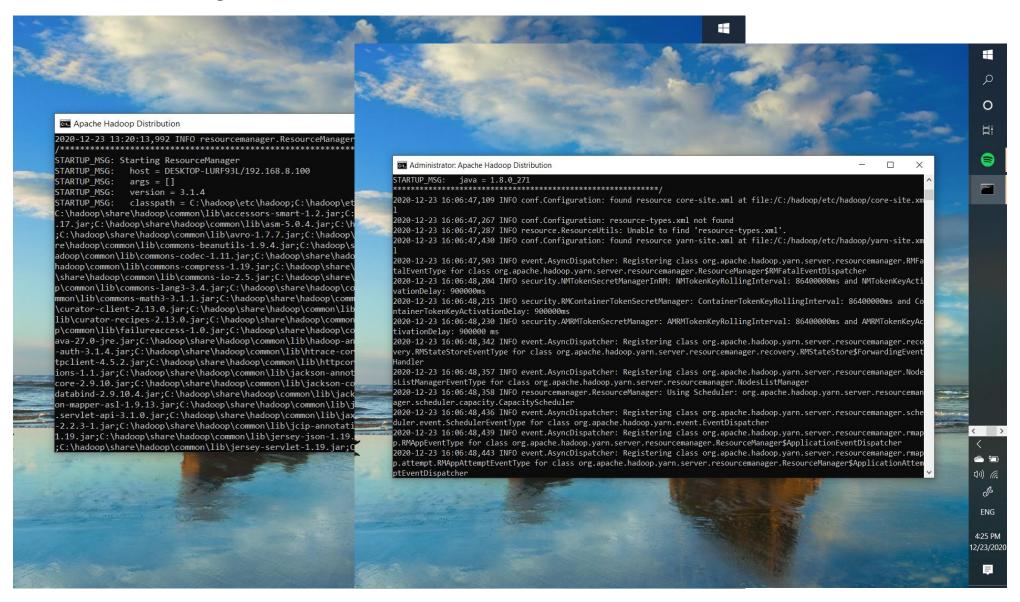
# After creating Name Node starting all cmd in Hadoop sbin by typing "start-all.cmd"



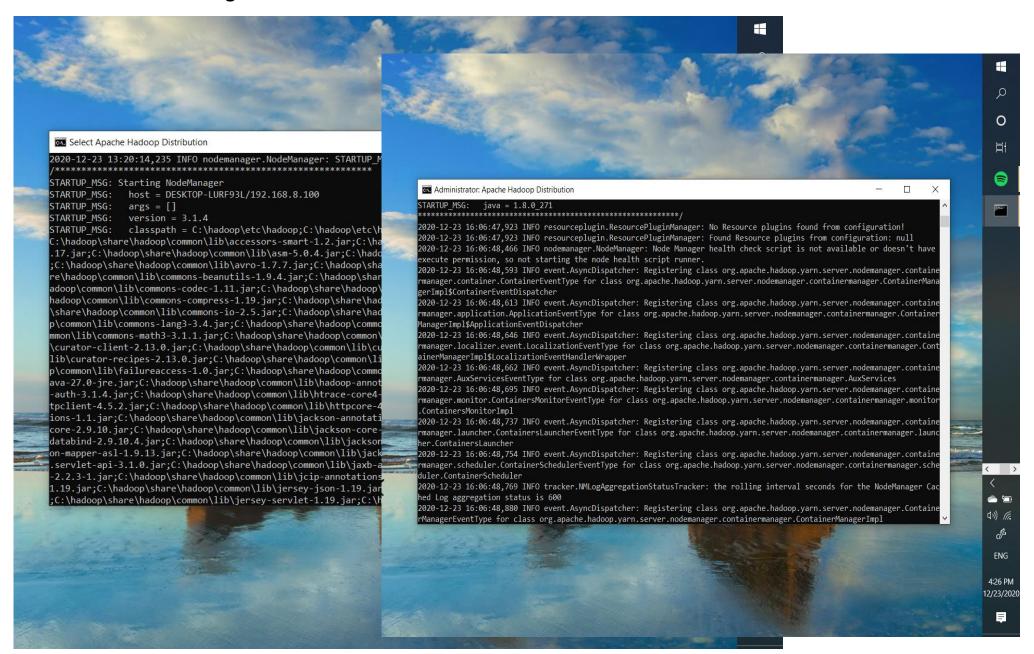
#### To show and start the Data Node



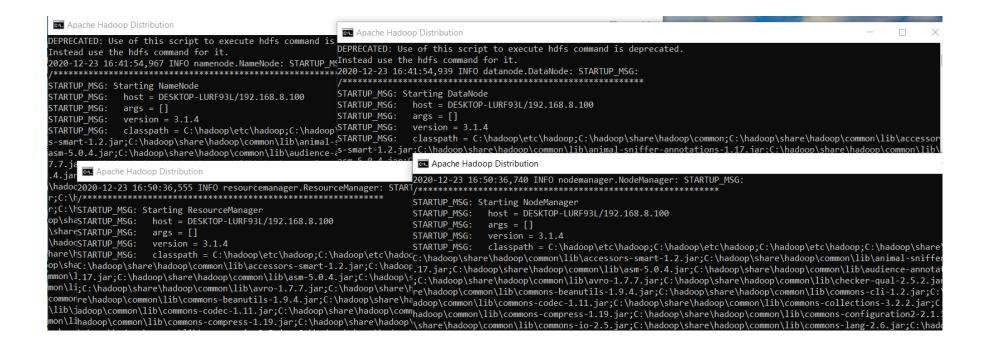
## **Resource Manager**



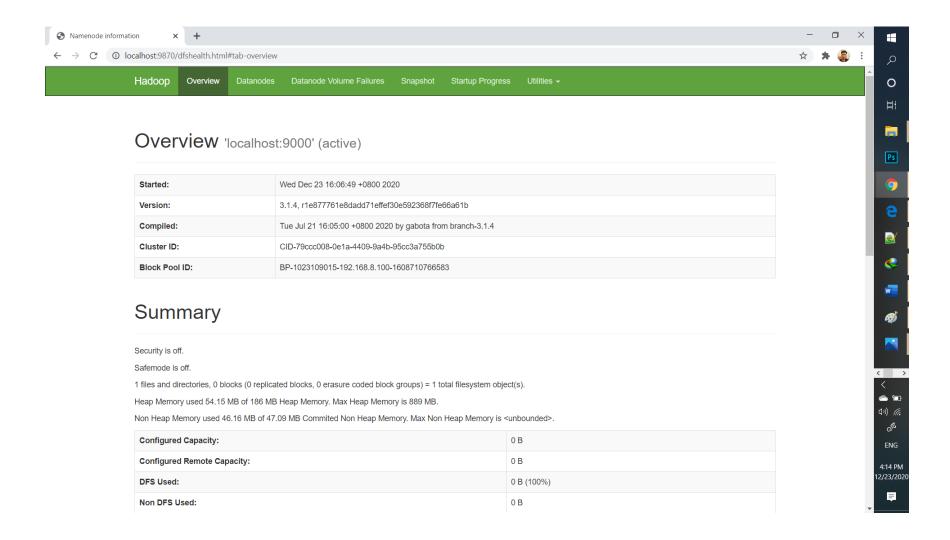
## **And Node Manager**



Checking the localhost if the Hadoop has already installed by typing "<a href="http://localhost:9870/">http://localhost:9870/</a>" but first don't close all the CMD running (NameNode, DataNode, ResourceManager, NodeManager) so that the localhost link is working.



After accessing the localhost link in the web browser you will see this:



### SUCCESSFULLY HADOOP HAS BEEN INSTALLED and Name Node and Data Node HAS BEEN CREATED!

